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# Wisconsin Forest Statistics, 1983

Gerhard K. Raile

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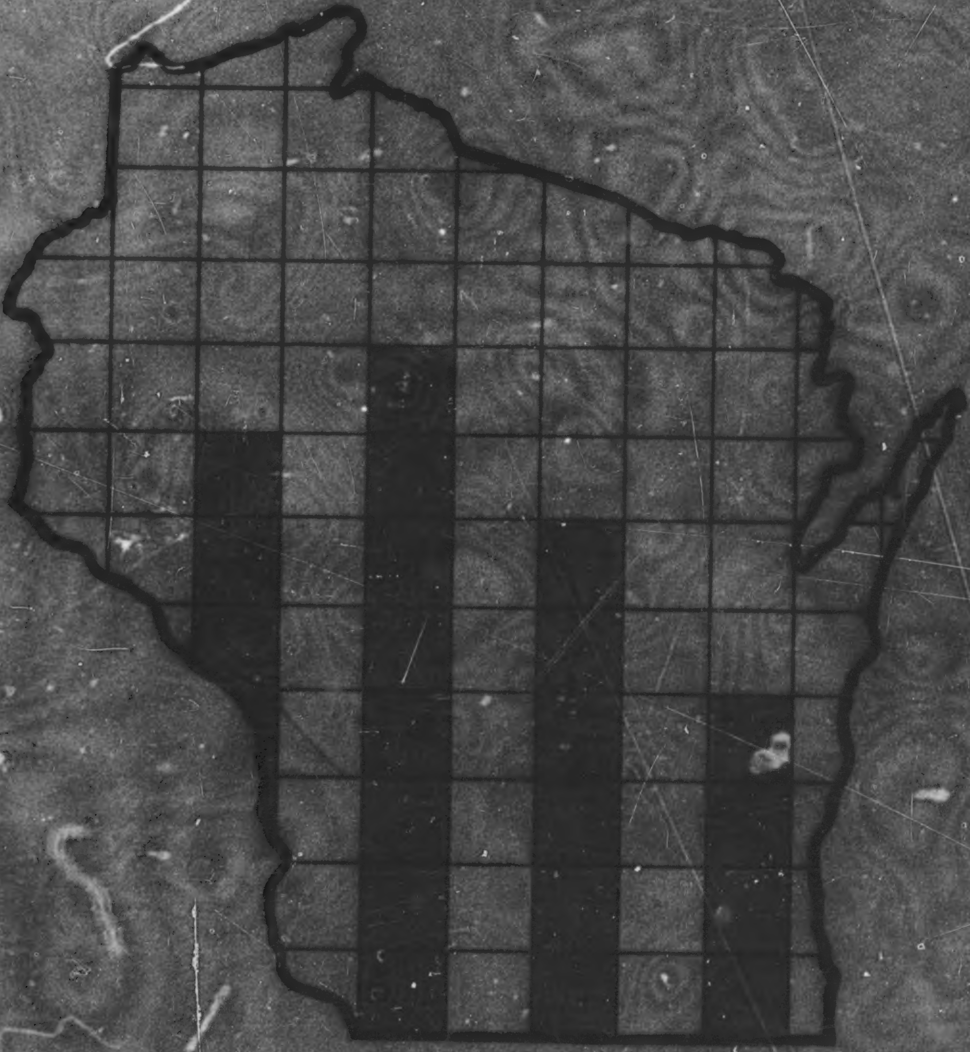

Information contained in this report includes the most commonly used Forest Inventory and Analysis statistics. However, additional forest resource data can be provided to interested users. Persons requesting additional information that can be provided from the raw inventory data are expected to pay for the retrieval costs. These costs will vary depending on the complexity of the request, from less than $100 for a relatively simple request to $2,000 for a complex retrieval involving the services of a Forest Inventory and Analysis computer programmer. If requests for data conflict with ongoing Forest Inventory and Analysis work, they will be scheduled so as to minimize the impact on the work unit.

Requests for unpublished information may be directed to:

Burton L. Essex
Forest Inventory and Analysis Project
North Central Forest Experiment Station
1992 Folwell Avenue
St. Paul, Minnesota 55108
Phone: (612) 642-5275

Area served: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin.

North Central Forest Experiment Station
Forest Service—U.S. Department of Agriculture
1992 Folwell Avenue
St. Paul, Minnesota 55108
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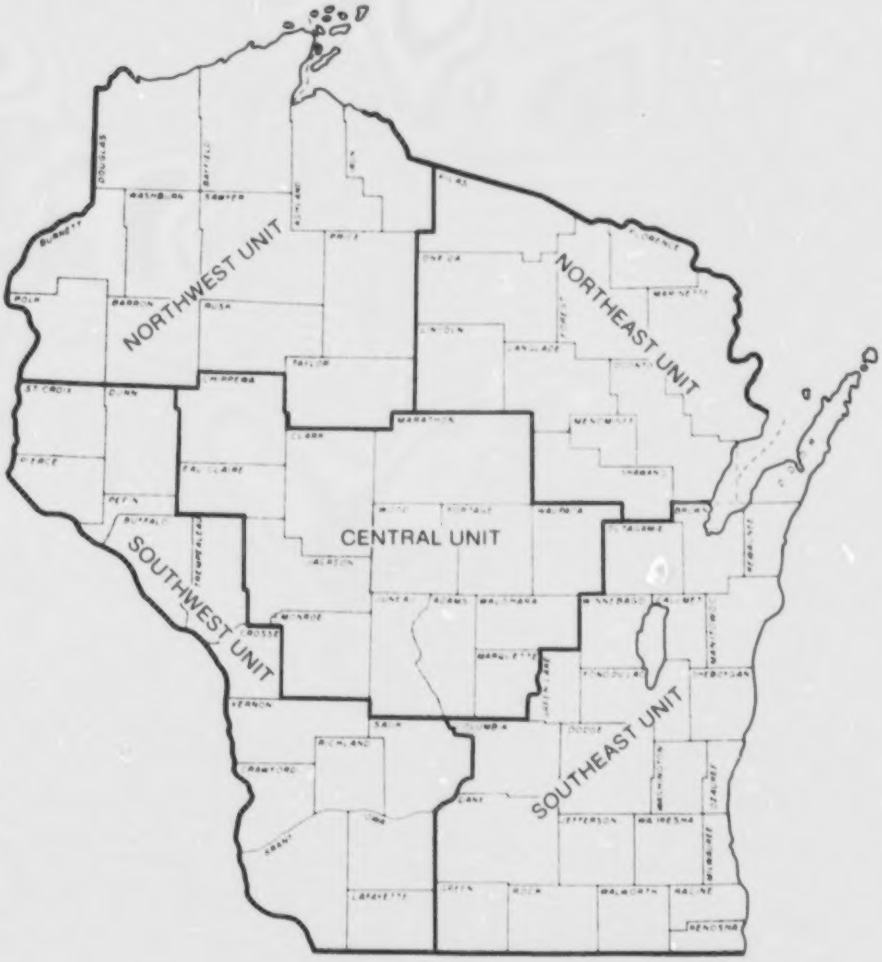
# FOREWORD

Forest Inventory and Analysis (FIA) is a continuing endeavor as mandated by the Forest and Rangeland Renewable Resources Planning Act of 1974 and the earlier McSweeney-McNary Forest Research Act of 1928. Its objective is to periodically determine the extent, condition, and volume of timber, growth, and depletions of the Nation's forest land. This kind of up-to-date information is essential to frame realistic forest policies and programs. USDA Forest Service regional experiment stations are responsible for conducting these inventories and publishing summary reports for individual states. The North Central Forest Experiment Station covers Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin.

Fieldwork for the 1983 Wisconsin forest inventory was begun in the summer of 1981 and was completed in late 1983. Reports on the three previous surveys of Wisconsin's timber resource are dated 1936, 1956, and 1968.

Similar Resource Bulletins reporting statistical highlights and detailed tables of the Survey Units in Wisconsin (fig 1.) are available. In addition to these statistical reports, a series of analytical reports will also be published that will analyze the State's timber resource.



NORTHWEST UNIT
NORTHEAST UNIT
CENTRAL UNIT
SOUTHWEST UNIT
SOUTHEAST UNIT
DOUGLAS
BAYFIELD
WASHBURN
SAWYER
ASHLAND
IRON
BURNETT
PRICE
POLK
BARRON
RUSK
TAYLOR
VILAS
FLORENCE
ONEIDA
FOREST
MARINETTE
LINCOLN
LANGLADE
OCONTO
ST. CROIX
DUNN
CHIPPEWA
MARATHON
MENOMINEE
CLARK
PIERCE
EAU CLAIRE
SHAWANO
PEPIN
BUFFALO
TREMPEALEAU
WOOD
PORTAGE
WAUPACA
OUTAGAMIE
BROWN
KEWAUNEE
DOOR
JACKSON
JUNEAU
ADAMS
WAUSHARA
WINNEBAGO
CALUMET
MANITOWOC
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
SAUK
COLUMBIA
DODGE
RICHLAND
CRAWFORD
DANE
WASHINGTON
OZAUKEE
GRANT
IOWA
JEFFERSON
WAUKESHA
MILWAUKEE
LAFAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA

Figure 1.—*Wisconsin Survey Units.*

More accurate survey information was obtained during the 1983 survey than otherwise would have been feasible because of intensified field sampling. Such sampling was made possible by additional funding and manpower provided by the Wisconsin State Legislature through the Department of Natural Resources. Data from the Department's canvass of all primary wood-using plants in the State were used to help estimate the quantity of timber products harvested in Wisconsin.

Aerial photos used in the Forest Inventory were furnished by the Wisconsin Department of Natural Resources, the USDA Agricultural Stabilization and Conservation Service, and the National Forests.

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# Wisconsin Forest Statistics, 1983

**Gerhard K. Raile**, *Mensurationist*

## HIGHLIGHTS

### Forest Area

- Forest land accounted for 15.4 million acres (44 percent of the State's land area) in 1983, compared with 14.9 million acres (43 percent) in 1968.
- Commercial forest land occupied 14.8 million acres (96 percent of the forest land) in 1983, compared with 14.5 million acres (97 percent) in 1968.
- Productive-reserved forest land totaled 260,900 acres in 1983, compared with 34,200 acres in 1968. Additions since 1968 include Apostle Islands National Lakeshore, Wild and Scenic Riverways, National Forest Wilderness Areas, state game management areas and state parks.
- Farmers and miscellaneous private individuals owned 9.1 million acres, 62 percent of the commercial forest in 1983.
- The maple-birch (4.0 million acres), aspen (3.3 million acres), and oak-hickory (2.9 million acres) forest types accounted for 69 percent of the commercial forest area.
- Poletimber stands accounted for 42 percent of the commercial forest area, followed by sawtimber stands (32 percent), sapling and seedling stands (25 percent), and nonstocked areas (1 percent).

### Timber Volume

- The volume of growing stock in 1983 was 15.5 billion cubic feet, 39 percent greater than the 11.2 billion in 1968.
- Hardwoods made up 77 percent of the growing-stock volume (11.9 billion cubic feet).
- Average growing-stock volume per acre in 1983 was 1,050 cubic feet compared with 768 cubic feet in 1968.
- Fifty-eight percent of the growing-stock volume was in trees less than 11 inches in diameter at breast height (d.b.h.).
- Sawtimber amounted to 35 billion board feet[1] in 1983.
- Thirty-seven percent of the growing-stock volume was in stands 41 to 60 years old.

### Net Growth

- Net annual growth rate of growing stock was 3.2 percent of inventory. Softwoods grew faster (3.9 percent) than hardwoods (2.9 percent).
- Net annual growth per acre increased from 28.9 cubic feet in 1967 to 33.3 cubic feet in 1982.
- Mortality of growing-stock trees averaged 0.9 percent of inventory in 1982 (136.8 million cubic feet).
- Disease accounted for 23 percent of growing-stock mortality.

### Timber Use

- Timber removals from growing stock totaled 285.0 million cubic feet in 1982: 247.2 million for timber products, 21.4 million for other removals, and 16.4 million for logging residue.
- The aspens made up 34 percent of the 1982 growing-stock removals.
- Output of timber products from roundwood totaled 395.3 million cubic feet in 1981, 42 percent of which was pulpwood.
- Wood residue from primary plants totaled 43.6 million cubic feet in 1981, of which 0.8 million were not used.

### Biomass

- Live shrub biomass yield (including trees less than 1 inch d.b.h.) was highest in the tamarack forest type—8,085 pounds per acre.
- Live tree biomass (trees greater than 1 inch d.b.h.) totaled 993.3 million green tons, nearly half in the boles of growing-stock trees.

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[1] *International 1/4-inch rule.*

# APPENDIX

## ACCURACY OF SURVEY

Forest Inventory and Analysis information is based on a sampling procedure designed to provide reliable statistics at the State and Survey Unit level. Consequently, the reported figures are estimates only. A measure of reliability of these figures is given by sampling errors. These sampling errors mean the chances are two out of three that the true inventory value is within the limits indicated.

For example, the estimated growing-stock volume in Wisconsin in 1983, 15,498.2 million cubic feet, has a sampling error of ±1.05 percent (±162.7 million cubic feet). Therefore, the growing-stock volume from a 100-percent inventory, would have a two in three chance of falling between 15,335.5 and 15,660.9 million cubic feet.

The following tabulation shows the sampling errors for the 1983 Wisconsin Inventory:

| Item | State totals | Sampling error |
|---|---|---|
| Growing stock | (Million cubic feet) | (Percent) |
| Volume | 15,498.2 | 1.05 |
| Growth | 491.2 | 1.68 |
| Removals | 285.0 | 10.09 |
| Sawtimber | (Million board feet) | |
| Volume | 35,035.4 | 1.59 |
| Growth | 1,443.0 | 2.38 |
| Removals | 826.3 | 11.23 |
| Commercial forest | (Thousand acres) | |
| Area | 14,759.4 | 0.22 |

As survey data are broken down into sections smaller than State or Survey Unit totals, the sampling error increases. The smaller the breakdown, the larger the sampling error. For example, the sampling error for growing-stock volume in a particular Unit or county is higher than that for total growing-stock volume in the State (table 75 shows the sampling errors for estimates smaller than State totals).

## SURVEY PROCEDURES

We used a two-phase sampling design for the 1983 Wisconsin survey. This sampling scheme and associated estimators are similar to sampling with partial replacement (SPR) in that a set of randomly located plots was available for remeasurement and a set of new randomly located plots were established and measured. Major enhancements in the new Wisconsin design were stratification for disturbance on the old sample and use of a growth model to improve regression estimates made on the old undisturbed forest plots. The growth model used was the Stand and Tree Evaluation and Modeling System (STEMS).[2]

The major steps in the new survey design were as follows:

1. The first phase of the survey was to interpret aerial photos. In this phase two sets of random points were located on current aerial photographs. The first was a set of new photo points and the second was a set of relocated old photo points (ground plot locations from the previous inventory). A total of 195,220 1-acre points, including old ground sample locations, were systematically distributed across aerial photos of the entire State, except the National Forests. These points were classified into land classes as shown below to make a preliminary estimate of forest area. Next, 89,420 of these points were stereoclassified as to stand-size class and density. Finally, a total of 15,535 points were examined on the ground to correct the preliminary area estimate for errors in classification and for actual changes in land use since the photos were taken.

| Land class | Photo points classified | Photo points stereo-classified | Inventory plots checked |
|---|---|---|---|
| Forest land | 85,183 | 85,183 | 6,999 |
| Unproductive/reserved forest land | 1,321 | 1,321 | 156 |
| Nonforest land | 102,312 | 2,916 | 7,914 |
| Water | 6,404 | 0 | 466 |
| Total | 195,220 | 89,420 | 15,535 |

2. The second phase of the survey was to sample ground plots. The plot selection and measurement procedures of phase two of the new Wisconsin survey design are outlined in figure 2.

From the new photo points, a random sample of ground plots were established and land use, volume, mortality and cutting were recorded. At each forest ground plot location, variable-radius plots (basal area factor 37.5) were established at 10 points uniformly placed over the sample acre. These locations were monumented for future remeasurement.

On the old inventory photo points (old plot locations), we used a somewhat different procedure. Old plots were either remeasurable (monumented) or

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[2] *For more information on STEMS, see: Belcher, D. L.; Holdaway, M. R.; Brand, G. J. A description of STEMS: The stand and tree evaluation and modeling system. Gen. Tech. Rep. NC-79. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station; 1981. 18 p.*

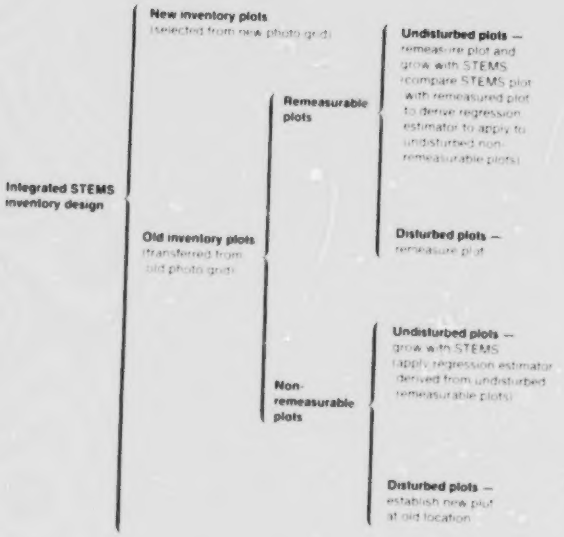
Integrated STEMS inventory design
New inventory plots
(selected from new photo grid)
Old inventory plots
(transferred from old photo grid)
Remeasurable plots
Undisturbed plots —
remeasure plot and grow with STEMS (compare STEMS plot with remeasured plot to derive regression estimator to apply to undisturbed non-remeasurable plots)
Disturbed plots —
remeasure plot
Non-remeasurable plots
Undisturbed plots —
grow with STEMS (apply regression estimator derived from undisturbed remeasurable plots)
Disturbed plots —
establish new plot at old location

Figure 2.—*Logic structure for the 1983 Wisconsin sample design.*

nonremeasurable (not monumented and thus difficult to relocate). Within both of these groups, old plots were additionally identified as undisturbed or disturbed. The remeasurable old inventory photo points which are classified as forest undisturbed were remeasured on the ground to obtain current land use, volume, growth, and removals data. Additionally, all forest undisturbed remeasurable plots were projected to the current time using STEMS to provide estimates of current volume and growth. The comparison of the projected and observed values on these plots provided regression estimators to adjust the projected values of the undisturbed nonremeasurable plots. All disturbed remeasurable plots were remeasured on the ground to assess changes since the last inventory.

Disturbance as used here refers to any change on a plot that can be detected on aerial photos and that the STEMS growth processor cannot predict, such as catastrophic mortality, cutting, seedling stands, and land use change.

The nonremeasurable forest points are those that were not monumented during the 1968 inventory. STEMS updated these old undisturbed plots, producing an estimate of current data. Thus these points became ground plots even though the information was obtained without actually visiting the plot. For points classified as disturbed, a new ground plot was established as close to the old location as possible. This allowed information about land use trends to be recorded even though the old plot could not be exactly relocated for remeasurement.

The estimation procedure for computing statistics from this sampling design was more complicated than the simple two-phase estimation procedure used in the past. In fact, this procedure yielded two independent samples, one coming from the new photo points and the other from the old photo points that were remeasured or projected. A more detailed description of the sampling design is available in a separate publication.[3]

3. Statistics on timber utilization during 1981 were obtained from mill surveys. The Wisconsin Department of Natural Resources canvassed resident sawmills, veneer mills, and other primary wood-using plants. The North Central Forest Experiment Station canvassed out-of-State sawmills, pulpmills, and veneer mills to determine their use of Wisconsin timber. Fuelwood and fencepost output was based on a sample of public and private landowners to determine their production of fuelwood and fenceposts. Estimates of primary mill residue used for fuelwood were obtained from the canvass of Wisconsin primary wood-using plants.

4. A total of 2,568 felled trees on 133 active logging operations were measured throughout the State during 1981-1982 to develop wood utilization factors for converting timber products output to timber removals for saw logs and pulpwood. Factors for all other products were obtained during the 1966-1967 Wisconsin utilization study.

5. Field data were sent to St. Paul, Minnesota, to be processed and analyzed.

## COMPARING WISCONSIN'S FOURTH INVENTORY WITH THE THIRD INVENTORY

Data from new forest inventories are often compared with data from earlier inventories to determine trends in forest resources. However, changes in procedures and definitions between surveys often make it necessary to adjust earlier survey data so that they are comparable to data from the new survey. A consistency check was made for each Unit to ensure that the changes observed between inventories reflect actual changes in the resource and not changes in definitions or procedures.

Between the 1968 and 1983 inventories of Wisconsin some procedural changes were made in the method of deriving annual mortality estimates, computing volume, and determining forest type.

Mortality figures for the 1968 inventory were based on field estimates from nonremeasurement plots. Information gathered on remeasurement plots during the current inventory was used to adjust the 1968 mortality figures. This adjustment also changed the estimate of net growth for the 1968 inventory. Additionally, the old spruce-fir forest type was separated into two distinct types for the new inventory—white spruce and balsam fir. Comparisons with old data may be made by adding the two new types together. The 1968 volumes for hard and soft maple in Northeast Wisconsin were adjusted upward by 17 percent due to the discovery that the volume equations used for these species in 1968 were in error. Ownership class definitions also changed between the two inventories. A new definition of Indian ownership shifted a large area reported in 1968 as forest industry to the Indian ownership class in this report. Also, a change in the definition of farm ownership shifted area reported in 1968 as farmer to the miscellaneous private ownership class in this report.

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[3] *Hahn, J. T.; Hansen, M. H.; Fairweather, S. E. A sampling procedure incorporating a growth simulator. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. (Manuscript in process).*

Except for the net growth and mortality information, volumes of hard and soft maple, and some ownership classes, the old and new inventories of this region may be directly compared.

## Checking for Consistency

A test was made to ensure that it was possible to move from the 1968 resource statistics to the 1983 values by means of Timber Resource Analysis System (TRAS), a USDA Forest Service computer program for updating, backdating, and projecting timber volume, growth, mortality, and removals. Using growth rates, mortality rates, and removals rates for the period between the two surveys, TRAS projected the inventory from 1968 to 1983. The program prints out volumes by diameter class for softwoods and hardwoods for selected years in the period. Thus, any inconsistencies in volume, growth, mortality, and removals were identified and resolved.

TRAS generates an estimate of what total removals had to be for the inventory to have changed as it did between surveys, given the volume, growth, and mortality data. Estimates of removals for products and for logging residues, two of the three components of total timber removals, were available from an independent utilization study. An estimate of "other" removals (see Definition of Terms in Appendix), the third component of total removals, was made by subtracting the first two removals components from the TRAS-generated total removals estimate. This estimate of "other" removals was compared with findings from remeasurement plots and new plots (stump counts and land use change) to check its validity. Total removals were average annual removals because the estimate of "other" removals was based on a removals trend line from 1968 to 1983.

## LOG GRADE

In Wisconsin the butt log of every sawtimber tree on every full permanent sample plot was graded for quality. Additionally, all of the logs in a smaller sample of trees throughout the State were graded. The volume yield by log grade for each tree in the latter sample was used to distribute the volume of trees in the former sample into log-grade classes. The resulting volumes by log-grade classes were expanded to provide an estimate for the entire State.

Logs were graded on the basis of external characteristics as indicators of quality. Hardwood species were graded according to "Hardwood Log Grades for Standard Lumber."[1] The best 12-foot section of the lowest 16-foot hardwood log, or the best 12-foot upper section if the butt log did not meet minimum log-grade standards, was graded as follows:

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[1] *Vaughn, C. L.; Wollin, C. A.; McDonald, K. A.; Bulgrin, E. H. Hardwood log grades for standard lumber. Res. Pap. FPL-63. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory; 1966. 52 p.*

# Forest Service standard grades for hardwood factory saw logs

| Grading factors | | Specifications | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Log grade 1 | | | Log grade 2 | | | | Log grade 3 |
| Position in tree | | Butts only | Butts and uppers | | Butts and uppers | | | | Butts and uppers |
| Scaling diameter, inches | | [1]13-15 | 16-19 | 20 + | [2]11 + | 12 + | | | 8 + |
| Length without trim, feet | | 10 + | | | 10 + | 8-9 | 10-11 | 12 + | 8 + |
| Required clear cuttings[3] of each of three best faces[4] | Min. length, feet | 7 | 5 | 3 | 3 | 3 | 3 | 3 | 2 |
| | Max. number | 2 | 2 | 2 | 2 | 2 | 2 | 3 | No Limit |
| | Min. proportion of log length required in clear cutting | 5/6 | 5/6 | 5/6 | 2/3 | 3/4 | 2/3 | 2/3 | 1/2 |
| Maximum sweep and crook allowance | For logs with less than one-fourth of end in sound defects | 15 percent | | | 30 percent | | | | 50 percent |
| | For logs with more than one-fourth of end in sound defects | 10 percent | | | 20 percent | | | | 35 percent |
| Maximum scaling deduction | | 40 percent[5] | | | 50 percent[6] | | | | 50 percent |

[1] Ash and basswood butts can be 12 inches if they otherwise meet requirements for small #1's.

[2] Ten-inch logs of all species can be #2 if they otherwise meet requirements for small #1's.

[3] A clear cutting is a portion of a face, extending the width of the face, that is free of defects.

[4] A face is one-fourth of the surface of the log as divided lengthwise.

[5] Otherwise #1 logs with 41-60 percent deductions can be #2.

[6] Otherwise #2 logs with 51-60 percent deductions can be #3.

# Forest Service standard specifications for hardwood construction logs (tie and timber logs)[1]

| | | |
|---|---|---|
| Position in tree | | Butt and upper |
| Min. diameter, small end | | 8 inches + |
| Min. length, without trim | | 8 feet |
| Clear cuttings | | No requirements. |
| Sweep allowance, absolute | | One-fourth of the diameter at the small end for each 8 feet of length. |
| Sound surface defects | Single knots | Any number, if no one knot has an average diameter above the callus in excess of one-third of the log diameter at point of occurrence. |
| | Whorled knots | Any number if sum of knot diameters above the callus does not exceed one-third of the log diameter at point of occurrence. |
| | Holes | Any number provided none has a diameter over one-third of the log diameter at point of occurrence, and none extends more than 3 inches into included timber.[2] |
| Unsound surface defects | | Same requirements as for sound defects if they extend into included timber.[2] No limit if they do not. |
| End defects | Sound | No requirements. |
| | Unsound | None allowed; log must be sound internally, but will admit one shake not to exceed one-fourth the scaling diameter and will admit a longitudinal split not extending more than 5 inches into the contained timber. |

[1] These specifications are minimum for the class If, from a group of logs, factory logs are selected first, thus leaving only nonfactory logs from which to select construction logs, then the quality range of the construction logs so selected is limited, and the class may be considered a grade If selection for construction logs is given first priority, it may be necessary to subdivide the class into grades

[2] Included timber is always square, and dimension is judged from small end

Softwood species were graded according to the following specifications on the following page.

# Log Grades for Eastern White Pine

| Log grade | Minimum size Diameter | Minimum size Length[1] | Sweep or crook allowance | Total cull allowance including sweep | Maximum weevil injury | Allowable knot size (inches)[2] on three best faces or minimum clearness of four faces |
|---|---|---|---|---|---|---|
| | *Inches* | *Feet* | --------*Percent* | -------- | *Number* | *Inches* |
| 1 | 12 & 13 | 8-16 | 20 | 50 | 0 | Four faces clear full length |
| | 14 + | 10-16 | 20 | 50 | 0 | Two faces clear full length, or four faces clear 50 percent length (6 feet min. length)[3] |
| 2 | 6 + | 8-16 | 30 | 50 | 0 | Sound knots l.e.[4] D/6 and less than 3 inches[5]<br>Unsound knots: l.e. 1½ inches and for: butt, lots l.e. D/12 upper logs l.e. D/10 or four faces clear 50 percent of length |
| 3 | 6 + | 8-16 | 40 | 50 | 8-foot logs 1 weevil<br>10-foot + logs: 2 weevil | Sound knots l.e. D/3 and less than 5 inches.<br>Unsound knots l.e. D/6 and less than 2½ inches. |
| 4 | 6 + | 8-16 | 50 | 50 | No limit | No limit |

[1] Plus trim

[2] Disregard all knots less than ½-inch diameter in all grades

[3] The sum of the diameter of sound knots plus twice the sum of the diameter of unsound knots (in inches) is less than or equal to ½ of the diameter of the log (inches).

[4] l.e. means less than or equal to

[5] D means d.i.b. of log at location of knot

## LOG GRADES FOR JACK PINE AND RED PINE

*Grade 1*: logs with three or four clear faces.[5]

*Grade 2*: logs with one or two clear faces.

*Grade 3*: logs with no clear faces.

After the tentative log grade is established from above, the log will be degraded one grade for each of the following, except that no log can be degraded below grade 3. Net scale after deduction for defect must be at least 50 percent of the gross contents of the log.

1. *Sweep.* Degrade any tentative 1 or 2 log one grade if sweep amounts to 3 or more inches and equals or exceeds one-third the diameter inside bark at small end.

2. *Heart rot.* Degrade any tentative 1 or 2 log grade if conk, massed hyphae, or other evidence of advance heart rot is found anywhere in it.

## LOG GRADES FOR ALL OTHER SOFTWOOD LOGS

**Grade 1**

1. Logs must be 16 inches in diameter or larger, 10 feet or longer, and with deduction for defect not more than 30 percent of gross scale.

2. Logs must be at least 75 percent clear on each of three faces.

3. All knots outside clear cutting must be sound and not over 2½-inches in size.

**Grade 2**

1. Logs must be 12 inches in diameter or larger, 10 feet or longer, and with a net scale after deduction for defect of at least 50 percent of the gross contents of the log.

2. Logs must be at least 50 percent clear on each of three faces or 75 percent clear on two faces.

**Grade 3**

1. Lots must be 6 inches in diameter or larger, 8 feet or longer, and with a net scale after deduction for defect or at least 50 percent of the gross contents of the log.

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[5] *A face is one-fourth of the circumference in width extending full length of the log. Clear faces are those free of: knots measuring more than ½ inches in diameter, overgrown knots of any size, and holes more than ¼ inches in diameter. Faces may be rotated to obtain the maximum number of clear ones.*

Note: (A) Diameters are diameter inside bark (d.i.b.) at small end of log.
(B) Percent clear refers to percent clear in one continuous section.

## TREE SPECIES GROUPS IN WISCONSIN[6]

| | |
|---|---|
| SOFTWOODS | |
| Jack pine | *Pinus banksiana* |
| Red pine | *Pinus resinosa* |
| Eastern white pine | *Pinus strobus* |
| White spruce | *Picea glauca* |
| Black spruce | *Picea mariana* |
| Balsam fir | *Abies balsamea* |
| Eastern hemlock | *Tsuga canadensis* |
| Tamarack | *Larix laricina* |
| Eastern redcedar | *Juniperus virginiana* |
| Northern white-cedar | *Thuja occidentalis* |
| Other softwoods | |
| Norway spruce | *Picea abies* |
| Scotch pine | *Pinus sylvestris* |
| HARDWOODS | |
| White oaks | |
| White oak | *Quercus alba* |
| Swamp white oak | *Quercus bicolor* |
| Bur oak | *Quercus macrocarpa* |
| Select red oak | |
| Northern red oak | *Quercus rubra* |
| Other red oaks | |
| Northern pin oak | *Quercus ellipsoidalis* |
| Black oak | *Quercus velutina* |
| Select hickory | |
| Shagbark hickory | *Carya ovata* |
| Other hickory | |
| Pignut hickory | *Carya glabra* |
| Bitternut hickory | *Carya cordiformis* |
| American basswood | *Tilia americana* |
| Beech | *Fagus grandifolia* |
| Yellow birch | *Betula alleghaniensis* |
| Hard maple | |
| Sugar maple | *Acer saccharum* |
| Black maple | *Acer nigrum* |
| Soft maple | |
| Red maple | *Acer rubrum* |
| Silver maple | *Acer saccharinum* |
| Elm | |
| American elm | *Ulmus americana* |
| Slippery elm | *Ulmus rubra* |
| Rock elm | *Ulmus thomasii* |
| Black ash | *Fraxinus nigra* |
| White and green ash | |
| White ash | *Fraxinus americana* |
| Green ash | *Fraxinus pennsylvanica* |
| Eastern cottonwood | *Populus deltoides* |
| Black willow | *Salix nigra* |
| Hackberry | *Celtis occidentalis* |
| Balsam poplar | *Populus balsamifera* |
| Bigtooth aspen | *Populus grandidentata* |
| Quaking aspen | *Populus tremuloides* |
| Paper birch | *Betula papyrifera* |
| River birch | *Betula nigra* |
| Black cherry | *Prunus serotina* |
| Black walnut | *Juglans nigra* |
| Butternut | *Juglans cinerea* |
| Other hardwoods | |
| Boxelder | *Acer negundo* |
| Black locust | *Robinia pseudoacacia* |
| Honeylocust | *Gleditsia triacanthos* |
| Red mulberry | *Morus rubra* |
| Northern catalpa | *Catalpa speciosa* |
| Noncommercial species | |
| Mountain maple | *Acer spicatum* |
| Eastern hophornbeam | *Ostrya virginiana* |
| Peachleaf willow | *Salix amygdaloides* |
| American hornbeam | *Carpinus caroliniana* |
| Hawthorn | *Crataegus* spp. |
| Striped maple | *Acer pensylvanicum* |
| Mountain-ash | *Sorbus* spp. |
| Pin cherry | *Prunus pensylvanica* |
| Chokecherry | *Prunus virginiana* |

## METRIC EQUIVALENTS OF UNITS USED IN THIS REPORT

1 acre = 4,046.86 square meters or 0.405 hectare.
1,000 acres = 405 hectares.
1 cubic foot = 0.0283 cubic meter.
1 foot = 30.48 centimeters or 0.3048 meter.
1 inch = 25.4 millimeters, 2.54 centimeters, or 0.0254 meter.
1 pound = 0.454 kilograms.
1 ton = 0.907 metric tons.

## DEFINITION OF TERMS

**Acceptable trees**.—Growing-stock trees of commercial species that meet specified standards of size, quality, and merchantability.

**Basal area**.—The area in square feet of the cross section at breast height of a single tree. When the basal areas of all live trees in a stand are summed, the result is usually expressed as square feet of basal area per acre.

**Biomass**.—The total above-ground weight, excluding foliage, of all live trees reported in green tons. Biomass is made up of 4 components:

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[6] *The common and scientific names are based on: Little, Elbert L. Checklist of native and naturalized trees of the United States. Agric. Handb. 541. Washington, D.C.: U.S. Department of Agriculture, Forest Service; 1979. 375 p.*

*Stumps*.—Biomass of a tree from ground level to a height of 1-foot.

*Boles*.—Biomass of a tree from the stump to a 4-inch top.

*Tops and limbs*.—Biomass of a tree above a 4-inch top and all limbs.

*1- to 5-inch trees*.—Above ground biomass of all live trees 1- to 5-inches in diameter at breast height.

**Commercial forest land**.—Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization. (Note: Areas qualifying as commercial forest land have the capability of producing in excess of 20 cubic feet per acre per year of annual growth under management. Currently inaccessible and inoperable areas are included, except when the areas involved are small and unlikely to become suitable for production of industrial wood in the foreseeable future.)

**Commercial species**.—Tree species presently or prospectively suitable for industrial wood products. (Note: Excludes species of typically small size, poor form, or inferior quality such as hophornbeam and hawthorn.)

**County and municipal land**.—Lands owned by counties and local public agencies or municipalities, or lands leased to these governmental units for 50 years or more.

**Cropland**.—Land under cultivation within the past 24 months; including cropland harvested, crop failures, cultivated summer fallow, idle cropland used only for pasture, orchards, and land in soil improvement crops, but excluding land cultivated in developing improved pasture.

**Cull**.—Portions of a tree that are unusable for industrial wood products, because of rot, form, or other defect.

**Diameter classes**.—A classification of trees based on diameter outside bark, measured at breast height (4.5 feet above the ground). (Note: d.b.h. is the common abbreviation for diameter at breast height. Two-inch diameter classes are commonly used in Forest Survey, with the even inch the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h. inclusive.)

**Farm**.—Any place from which $1,000 or more of agricultural products were produced and sold during the year.

**Farmer-owned land**.—Land owned by farm operators. (Note: Excludes land leased by farm operators from nonfarm owners, such as railroad companies and States.)

**Forest industry land**.—Land owned by companies or individuals operating primary wood-using plants.

**Forest land**.—Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. (Note: Stocking is measured by comparison of basal area and/or number of trees, by age or size and spacing with specified standards.) The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads and trails, streams, or other bodies of water or clearings in forest areas shall be classed as forest if less than 120 feet wide. Also see definitions for land area, commercial forest land, noncommercial forest land, productive-reserved forest land, stocking, unproductive forest land, and water.

**Forest trees**.—Woody plants having a well-developed stem and usually more than 12 feet in height at maturity.

**Forest type**.—A classification of forest land based upon the species forming a plurality of live tree stocking. Major forest types in Wisconsin are:

*Jack pine*.—Forests in which jack pine comprises a plurality of the stocking. (Common associates include eastern white pine, red pine, aspen, birch, and oak.)

*Red pine*.—Forests in which red pine comprises a plurality of the stocking. (Common associates include eastern white pine, jack pine, aspen, birch, and oak.)

*White pine*.—Forests in which eastern white pine comprises a plurality of the stocking. (Common associates include red pine, jack pine, aspen, birch, and maple.)

*Balsam fir*.—Forests in which balsam fir and white spruce comprise a plurality of stocking with balsam fir the most common. (Common associates include aspen, maple, birch, northern white-cedar, and tamarack.)

*White spruce*.—Forests in which white spruce and balsam fir comprise a plurality of the stocking with white spruce the most common. (Common associates include aspen, maple, birch, northern white-cedar, and tamarack.)

*Black spruce*.—Forests in which swamp conifers comprise a plurality of the stocking with black spruce the most common. (Common associates include balsam fir, tamarack, and northern white-cedar.)

*Northern white-cedar*.—Forests in which swamp conifers comprise a plurality of the stocking with northern white-cedar the most common. (Common associates include balsam fir, tamarack, and black spruce.)

*Tamarack*.—Forests in which swamp conifers comprise a plurality of the stocking with tamarack the most common. (Common associates include black spruce, balsam fir, and northern white-cedar.)

*Oak-hickory*.—Forests in which northern red oak, white oak, bur oak, or hickories, singly or in combination, comprise a plurality of the stocking. (Common associates include jack pine, elm, and maple.)

*Elm-ash-soft maple*.—Forests in which lowland elm, ash, cottonwood, and red maple, singly or in combination, comprise a plurality of the stocking. (Common associates include birch, aspen, and balsam fir.)

*Maple-birch*.—Forests in which sugar maple, basswood, yellow birch, upland American elm, and red maple, singly or in combination, comprise a plurality of the stocking. (Common associates include white pine, elm, hemlock, and basswood.)

*Aspen*.—Forests in which quaking aspen or bigtooth aspen, singly or in combination, comprise a plurality of the stocking. (Common associates include oak, pines, balsam fir, and paper birch.)

*Paper birch*.—Forests in which paper birch comprises a plurality of the stocking. (Common associates include maple, aspen, and balsam fir.)

*Exotic*.—Forests in which species not native to Wisconsin comprise a plurality of the stocking. (Mostly Scotch pine plantations.)

**Gross area**.—The entire area of land and water as determined by the Bureau of the Census, 1980.

**Growing-stock trees**.—Live trees of commercial species qualifying as acceptable trees. (Note: Excludes rough, rotten, and dead trees.)

**Growing-stock volume**.—Net volume in cubic feet of growing-stock trees 5 inches d.b.h. and over, from a 1-foot stump to a minimum 4-inch top diameter outside bark of the central stem or to the point where the central stem breaks into limbs. Cubic feet can be converted to cords by dividing by 79 cubic feet per solid wood cord.

**Hardwoods**.—Dicotyledonous trees, usually broad-leaved and deciduous.

**Idle farmland**.—Includes former croplands, orchards, improved pastures, and farm sites not tended within the past 2 years and presently less than 16.7 percent stocked with trees.

**Improved pasture**.—Land currently improved for grazing, by cultivation, seeding, irrigation, or clearing of trees or brush and less than 16.7 percent stocked with trees.

**Indian land**.—All lands held in trust by the United States for individual Indians or tribes, or all lands, titles to which are held by individual Indians or tribes, subject to Federal restrictions against alienation.

**Land area**.—A. *Bureau of the Census*. The area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river flood plains (omitting tidal flats below mean high tide); streams, sloughs, estuaries, and canals less than one-eighth of a statute mile wide; and lakes, reservoirs, and ponds less than 40 acres in area.

B. *Forest Inventory and Analysis*. The same as the Bureau of the Census, except minimum width of streams, etc. is 120 feet and minimum size of lakes, etc. is 1 acre.

**Live trees**.—Growing-stock, rough and rotten trees 1 inch d.b.h. and larger.

**Log grades**.—A classification of logs based on external characteristics as indicators of quality or value. (See Appendix for specific grading factors used.)

**Logging residues**.—The unused portions of growing-stock trees cut or killed by logging.

**Maintained road**.—Any road, hard-topped or other surfaces, that is plowed or graded at least once a year. Includes rights-of-way that are cut or treated to limit herbaceous growth.

**Marsh**.—Nonforest land that characteristically supports low, generally herbaceous or shrubby vegetation and that is intermittently covered with water.

**Merchantable**.—Refers to a pulpwood or saw log section that meets pulpwood or saw log specifications, respectively.

**Miscellaneous federal land**.—Federal land other than National Forest.

**Miscellaneous private land**.—Privately owned land other than forest-industry and farmer-owned land.

**Mortality**.—The volume of sound wood in growing-stock and sawtimber trees that die annually.

**National Forest land**.—Federal lands that have been legally designated as National Forest or purchase units, and other land under the administration of the USDA Forest Service.

**Net annual growth of growing stock**.—The annual change in volume of sound wood in live sawtimber and poletimber trees and the total volume of trees entering these classes through ingrowth, less volume losses resulting from natural causes.

**Net annual growth of sawtimber**.—The annual change in the volume of live sawtimber trees and the total volume of trees reaching sawtimber size, less volume losses resulting from natural causes.

**Net volume**.—Gross volume less deductions for rot, sweep, or other defect affecting use for timber products.

**Noncommercial forest land**.—(a) Unproductive forest land and (b) productive-reserved forest land.

**Noncommercial species**.—Tree species of typically small size, poor form, or inferior quality which normally do not develop into trees suitable for industrial wood products.

**Nonforest land**.—Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses. (Note: Includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1- to 40-acre areas of water classified by the Bureau of the Census as land. If intermingled in forest areas, unimproved roads and nonforest strips must be more than 120 feet wide and more than 1 acre in area, to qualify as nonforest land.)

a. *Nonforest land without trees*.—Nonforest land with no live trees present.

b. *Nonforest land with trees*.—Nonforest land with one or more trees per acre at least 5 inches d.b.h.

**Nonstocked land**.—Commercial forest land less than 16.7 percent stocked with growing-stock trees.

**Other removals**.—Growing-stock trees removed but not utilized for products, or trees left standing but "removed" from the commercial forest land classification by land use change. Examples are removals from cultural operations such as timber stand improvement work, land clearing, and changes in land use.

**Ownership**.—Property owned by one owner, regardless of the number of parcels in a specified area.

**Ownership size class**.—The amount of commercial forest land owned by one owner, regardless of the number or parcels.

**Owner tenure**.—The length of time a property has been held by the owner.

**Pasture and range**.—Land which is currently improved for grazing by cultivation seeding or irrigation plus land on which the natural plant cover is composed principally of native grasses, forbs, or shrubs valuable for forage.

**Physiographic class**.—A measure of soil and water conditions that affect tree growth on a site. The physiographic classes are:

*Xeric sites*.—Very dry soils where excessive drainage seriously limits both growth and species occurrence. Example: sandy jack pine plains.

*Xeromesic sites*.—Moderately dry soils where excessive drainage limits growth and species occurrence to some extent. Example: dry oak ridge.

*Mesic sites*.—Deep, well-drained soils. Growth and species occurrence are limited only by climate.

*Hydromesic sites*.—Moderately wet soils where insufficient drainage or infrequent flooding limits growth and species occurrence to some extent. Example: better drained bottomland hardwood sites.

*Hydric sites*.—Very wet sites where excess water seriously limits both growth and species occurrence. Example: wet, frequently flooded river bottoms and spruce bogs.

**Plant byproducts**.—Plant residues used for products such as mulch, pulp chips, and fuelwood.

**Plant residues**.—Wood and bark materials generated at manufacturing plants during production of other products.

**Poletimber stands**.—(See stand-size class.)

**Poletimber trees**.—Growing-stock trees of commercial species at least 5 inches d.b.h., but smaller than sawtimber size.

**Productive-deferred**.—Forest land sufficiently productive to qualify as commercial forest land but presently withdrawn from timber utilization because it is being considered for possible inclusion into the Wilderness system.

**Productive-reserved forest land**.—Forest land sufficiently productive to qualify as commercial forest land but withdrawn from timber utilization through statute, administrative regulation, designation, or exclusive use for Christmas tree production, as indicated by annual shearing.

**Rotten trees**.—Live trees of commercial species that do not contain at least one 12-foot saw log or two saw logs 8 feet or longer, now or prospectively, and/or do not meet Regional specifications for freedom from defect primarily because of rot; that is, when more than 50 percent of the cull volume in a tree is rotten.

**Rough trees**.—(a) Live trees of commercial species that do not contain at least one merchantable 12-foot saw log or two saw logs 8 feet or longer, now or prospectively, and/or do not meet Regional specifications for freedom from defect primarily because of roughness or poor form, and (b) all live trees of noncommercial species.

**Roundwood products**.—Logs, bolts, or other round sections (including chips from roundwood) cut from trees for industrial or consumer uses. (Note: Includes saw logs, veneer logs and bolts; cooperage logs and bolts; pulpwood; fuelwood; piling; poles; posts; hewn ties; mine timbers; and various other round, split, or hewn products.)

**Salvable dead trees**.—Standing or down dead trees that are considered merchantable by Regional standards.

**Saplings**.—Live trees 1 to 5 inches d.b.h.

**Sapling-seedling stands**.—(See stand-size class.)

**Saw log**.—A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight and with a minimum diameter outside bark (d.o.b.) for softwoods of 7 inches (9 inches for hardwoods) or other combinations of size and defect specified by Regional standards.

**Saw log portion**.—That part of the bole of sawtimber trees between the stump and the saw log top.

**Saw log top**.—The point on the bole of sawtimber trees above which a saw log cannot be produced. The minimum saw log top is 7 inches d.o.b. for softwoods and 9 inches d.o.b. for hardwoods.

**Sawtimber stands**.—(See stand-size class.)

**Sawtimber trees**.—Growing-stock trees of commercial species containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer, and meeting Regional specifications for freedom from defect. Softwoods must be at least 9 inches d.b.h. Hardwoods must be at least 11 inches d.b.h.

**Sawtimber volume**.—Net volume of the saw log portion of live sawtimber in board feet, International 1/4-inch rule, from stump to a minimum 7 inches top diameter outside bark (d.o.b.) for softwoods and a minimum 9 inches top d.o.b. for hardwoods.

**Seedlings**.—Live trees less than 1 inch d.b.h. that are expected to survive. Only softwood seedlings more than 6 inches tall and hardwood seedlings more than 1 foot tall are counted.

**Short-log (rough tree)**.—Sawtimber-size trees of commercial species that contain at least one merchantable 8- to 11-foot saw log but not a 12-foot saw log.

**Shrub**.—A woody, perennial plant differing from a perennial herb in its persistent and woody stem(s), and less definitely from a tree in its lower stature and/or the general absence of a well-defined main stem. For this report shrubs were separated somewhat arbitrarily into tall and low shrubs as follows:

*Tall shrubs*.—Shrubs normally taller than 1.6 to 3.2 feet (0.5 to 1.0 meter).

*Low shrubs*.—Shrubs normally shorter than 1.6 to 3.2 feet (0.5 to 1.0 meter). (Woody perennial vines, such as grape, were included with low shrubs.)

**Shrub biomass**.—The total above-ground weight (including the bark) of selected species of shrubs and trees less than 1 inch d.b.h.

**Site class**.—A classification of forest land in terms of inherent capacity to grow crops of industrial wood based on fully stocked natural stands.

**Site index**.—An expression of forest site quality based on the height of a free-growing dominant or codominant tree of a representative species in the forest type at age 50.

**Softwoods**.—Coniferous trees, usually evergreen, having needles or scale-like leaves.

**Stand**.—A growth of trees on a minimum of 1 acre of forest land that is stocked by forest trees of any size.

**Stand-age class**.—Age of the main stand. Main stand refers to trees of the dominant forest type and stand-size class.

**Stand-area class**.—The extent of a continuous forested area of the same forest type, stand-size class, and stand-density class.

**Stand-size class**.—A classification of forest land based on the size class of growing-stock trees on the area; that is, sawtimber, poletimber or seedlings and saplings.

*Sawtimber stands*.—Stands at least 16.7 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

*Poletimber stands*.—Stands at least 16.7 percent stocked with growing-stock trees of which half or more of this stocking is in poletimber and/or sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

*Sapling-seedling stands*.—Stands at least 16.7 percent stocked with growing-stock trees of which more than half of the stocking is saplings and/or seedlings.

*Nonstocked stands*.—Stands in which stocking of growing-stock trees is less than 16.7 percent.

**State land**.—Land owned by States, or land leased to these governmental units for 50 years or more.

**Stocking**.—The degree of occupancy of land by trees, measured by basal area and/or the number of trees in a stand by size or age and spacing, compared to the basal area and/or number of trees required to fully utilize the growth potential of the land; that is, the stocking standard.

A stocking percent of 100 indicates full utilization of the site and is equivalent to 80 square feet of basal area per acre in trees 5 inches d.b.h. and larger. In a stand of trees less than 5 inches d.b.h., a stocking per cent of 100 would indicate that the present number of trees is sufficient to produce 80 square feet of basal area per acre when the trees reach 5 inches d.b.h.

Stands are grouped into the following stocking classes:

*Overstocked stands*.—Stands in which stocking of trees is 134.0 percent or more.

*Fully stocked stands*.—Stands in which stocking of trees is from 101.0 to 133.9 percent.

*Medium stocked stands*.—Stands in which stocking of trees is from 61.0 to 100.9 percent.

*Poorly stocked stands*.—Stands in which stocking of trees is from 16.7 to 60.9 percent.

*Nonstocked areas*.—Commercial forest land on which stocking of trees is less than 16.7 percent.

**Timber removals from growing stock**.—The volume of sound wood in live sawtimber and poletimber trees removed annually for forest products (including roundwood products and logging residues) and for other removals. Roundwood products are logs, bolts, or other round sections cut from trees. Logging residues are the unused portions of cut trees plus unused trees killed by logging. Other removals are growing-stock trees removed by cultural operations such as timber stand improvement work, and by land clearing and changes in land use.

**Timber removals from sawtimber**.—The net board-foot volume of live sawtimber trees removed for forest products annually (including roundwood products and logging residues) and for other removals.

**Timber products output**.—All timber products cut from roundwood and byproducts of wood manufacturing plants. Roundwood products include logs, bolts, or other round sections cut from growing-stock trees, cull trees, salvable dead trees, trees on nonforest land, noncommercial species, sapling-size trees, and limbwood. Byproducts from primary manufacturing plants include slabs, edging, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, and screenings of pulpmills that are used as pulpwood chips or other products.

**Tree biomass**.—The total aboveground weight (including the bark) of all live trees.

**Tree size class**.—A classification of trees based on diameter at breast height, including sawtimber trees, poletimber trees, saplings, and seedlings.

**Unproductive forest land**—Forest land incapable of producing 20 cubic feet per acre of annual growth or of yielding crops of industrial wood under natural conditions because of adverse site conditions. (Note: Adverse conditions include shallow soils, dry climate, poor drainage, high elevation, steepness, and rockiness.)

**Upper stem portion**.—That part of the bole of sawtimber trees above the saw log top to a minimum top diameter of 4 inches outside bark or to the point where the central stem breaks into limbs.

**Urban and other areas**.—Areas within the legal boundaries of cities and towns; suburban areas developed for residential, industrial, or recreational purposes; schoolyards, cemeteries, roads; railroads; airports; beaches; powerlines; and other rights-of-way; or other nonforest land not included in any other specified land use class.

**Water**.—(a) *Bureau of the Census*.—Permanent inland water surfaces, such as lakes, reservoirs, and ponds having 40 acres or more of area; streams, sloughs, estuaries, and canals one-eighth of a statute mile or more in width.

(b) *Noncensus*.—Permanent inland water surfaces, such as lakes, reservoirs, and ponds having 1-39.9 acres of area; streams, sloughs, estuaries, and canals 120 feet to one-eighth of a statute mile in width.

**Wooded pasture**.—Improved pasture with more than 16.7 percent stocking in live trees but less than 25 percent stocking in growing-stock trees. Area is currently improved for grazing or there is other evidence of grazing.

**Wooded strip**.—An acre or more of natural continuous forest land that would otherwise meet survey standards for commercial forest land except that it is less than 120 feet wide.

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(In thousand acres)

| Land class | 1968 | 1983 |
|---|---|---|
| Forest land | | |
| Commercial forest land | | |
| Jack pine | 727.6 | 546.5 |
| Red pine | 310.2 | 478.2 |
| White pine | 177.6 | 225.6 |
| Balsam fir | 552.8 | 419.4 |
| White spruce | 75.2 | 61.4 |
| Black spruce | 235.9 | 273.0 |
| Northern white-cedar | 302.4 | 370.7 |
| Tamarack | 222.2 | 222.7 |
| Oak-hickory | 2,664.9 | 2,858.7 |
| Elm-ash-soft maple | 1,157.6 | 1,240.6 |
| Maple-birch | 3,521.6 | 3,996.9 |
| Aspen | 3,664.6 | 3,261.5 |
| Paper birch | 554.4 | 641.6 |
| Exotic | -- | 2.2 |
| Nonstocked | 369.8 | 160.4 |
| Subtotal | 14,536.8 | 14,759.4 |
| Noncommercial forest land | | |
| Unproductive | 374.4 | 331.0 |
| Productive-reserved | 34.2 | 260.9 |
| Subtotal | 408.6 | 591.9 |
| Total | 14,945.4 | 15,351.3 |
| Nonforest land | | |
| Cropland | 12,043.3 | 12,712.4 |
| Pasture and range | 1,845.1 | 2,128.7 |
| Other | 6,024.7 | 4,640.4 |
| Total | 19,913.1 | 19,481.5 |
| Total land | 34,858.5 | 34,832.8 |
| Water (Bureau of the Census) | 1,080.1[1] | 1,115.6[2] |
| Total land and water | 35,938.6[1] | 35,948.4[2] |

[1] U.S. Department of Commerce, Bureau of Census, 1960.

[2] U.S. Department of Commerce, Bureau of Census, 1980.

Table 2.--Area of land by land use class and Forest Survey Unit, Wisconsin, 1983

(In thousand acres)

| | All | Forest Survey Unit | | | | |
|---|---|---|---|---|---|---|
| Land use class | Units | Northeast | Northwest | Central | Southwest | Southeast |
| Forest land | | | | | | |
| Commercial forest | 14,759.4 | 3,828.5 | 5,150.8 | 2,950.9 | 1,920.0 | 909.2 |
| Unproductive forest | 331.0 | 140.8 | 165.8 | 21.5 | -- | 2.9 |
| Productive reserved | 260.9 | 52.0 | 114.6 | 30.1 | 38.8 | 25.4 |
| Total | 15,351.3 | 4,021.3 | 5,431.2 | 3,002.5 | 1,958.8 | 937.5 |
| Nonforest land | | | | | | |
| Nonforest with trees | | | | | | |
| Cropland with trees | 54.1 | 3.9 | 12.6 | 9.9 | 7.4 | 20.3 |
| Improved pasture with trees | 322.3 | 34.7 | 60.1 | 99.4 | 115.9 | 12.2 |
| Wooded strips | 45.0 | 5.8 | 8.1 | 20.9 | 10.2 | -- |
| Idle farmland with trees | 110.5 | 21.5 | 16.0 | 60.5 | 12.5 | -- |
| Marsh with trees | 312.6 | 40.1 | 90.6 | 149.4 | 12.7 | 19.8 |
| Urban and other with trees | 244.3 | 56.4 | 56.9 | 69.1 | 8.7 | 53.2 |
| Windbreaks | 40.8 | 5.0 | 10.6 | 2.6 | 12.2 | 10.4 |
| Wooded pasture | 112.1 | -- | 30.3 | 32.0 | 47.4 | 2.4 |
| Subtotal | 1,241.7 | 167.4 | 285.2 | 443.8 | 227.0 | 118.3 |
| Nonforest without trees | | | | | | |
| Cropland without trees | 12,658.3 | 744.7 | 1,259.7 | 2,431.1 | 2,895.2 | 5,327.6 |
| Improved pasture without trees | 1,694.3 | 174.6 | 255.0 | 407.3 | 549.2 | 308.2 |
| Idle farm without trees | 195.2 | 55.8 | 14.6 | 60.3 | 20.5 | 44.0 |
| Marsh without trees | 1,206.0 | 215.2 | 374.2 | 259.6 | 55.1 | 301.9 |
| Other farm-farmstead | 364.2 | 36.4 | 23.2 | 88.8 | 66.0 | 149.8 |
| Urban and other | 2,028.7 | 244.9 | 269.2 | 449.4 | 372.1 | 693.1 |
| Noncensus water | 93.1 | 39.9 | 13.1 | 27.4 | 6.6 | 6.1 |
| Subtotal | 18,239.8 | 1,511.5 | 2,209.0 | 3,723.9 | 3,964.7 | 6,830.7 |
| Total | 19,481.5 | 1,678.9 | 2,494.2 | 4,167.7 | 4,191.7 | 6,949.0 |
| Total land | 34,832.8 | 5,700.2 | 7,925.4 | 7,170.2 | 6,150.5 | 7,886.5 |
| Water (Bureau of the Census)[1/] | 1,115.6 | 262.8 | 290.3 | 114.6 | 136.6 | 311.3 |
| Total land and water[1/] | 35,948.4 | 5,963.0 | 8,215.7 | 7,284.8 | 6,287.1 | 8,197.8 |

Table 3.--Area of commercial forest land by ownership class and Forest Survey Unit, Wisconsin, 1983

(In thousand acres)

| | All | Forest Survey Unit | | | | |
|---|---|---|---|---|---|---|
| Ownership class | Units | Northeast | Northwest | Central | Southwest | Southeast |
| National Forest | 1,242.3 | 548.8 | 693.5 | -- | -- | -- |
| Miscellaneous federal | 176.2 | 3.9 | 7.3 | 130.6 | 29.8 | 4.6 |
| State | 569.4 | 193.7 | 176.8 | 96.6 | 34.8 | 67.5 |
| County and municipal | 2,179.8 | 646.9 | 1,109.8 | 399.3 | 10.9 | 12.9 |
| Indian | 353.7 | 254.5 | 94.6 | 4.6 | -- | -- |
| Forest industry | 1,156.0 | 485.3 | 529.2 | 126.0 | -- | 15.5 |
| Farmer | 3,513.7 | 381.6 | 450.2 | 996.7 | 1,255.9 | 429.3 |
| Misc. private-corp. | 665.9 | 163.1 | 224.0 | 129.5 | 92.8 | 56.5 |
| Misc. private-indiv. | 4,902.4 | 1,150.7 | 1,865.4 | 1,067.6 | 495.8 | 322.9 |
| All owners | 14,759.4 | 3,828.5 | 5,150.8 | 2,950.9 | 1,920.0 | 909.2 |

Table 4.--Area of land and forest land by county, Wisconsin, 1983

| County | All land[1] | Forest land[2] |  |  | Commercial forest as a percent of land area | All forest as a percent of land area | Sampling error for commercial forest land (percent) |
|---|---|---|---|---|---|---|---|
|  |  | All forest | Noncommercial[3] | Commercial[4] |  |  |  |
| **NORTHEAST UNIT** |  |  |  |  |  |  |  |
| **Florence** | 310.8 | 254.2 | 10.2 | 244.0 | 79 | 82 | 1.74 |
| **Forest** | 647.1 | 543.9 | 51.2 | 492.7 | 76 | 84 | 1.22 |
| **Langlade** | 559.0 | 391.7 | 17.2 | 374.5 | 67 | 70 | 1.40 |
| **Lincoln** | 567.1 | 411.2 | 17.4 | 393.8 | 69 | 73 | 1.37 |
| **Menominee** | 229.7 | 213.1 | -- | 213.1 | 93 | 93 | 1.86 |
| **Marinette** | 893.1 | 661.0 | 21.3 | 639.7 | 72 | 74 | 1.07 |
| **Oconto** | 641.4 | 357.4 | 10.3 | 347.1 | 54 | 56 | 1.46 |
| **Oneida** | 723.2 | 531.1 | 34.0 | 497.1 | 69 | 73 | 1.22 |
| **Shawano** | 574.0 | 259.2 | 4.0 | 255.2 | 45 | 45 | 1.70 |
| **Vilas** | 554.8 | 398.5 | 27.2 | 371.3 | 67 | 72 | 1.41 |
| **All counties** | 5,700.2 | 4,021.3 | 192.8 | 3,828.5 | 67 | 71 | 0.44 |
| **NORTHWEST UNIT** |  |  |  |  |  |  |  |
| **Ashland** | 670.9 | 569.1 | 65.3 | 503.8 | 75 | 85 | 1.16 |
| **Barron** | 553.4 | 165.7 | 7.0 | 158.7 | 29 | 30 | 2.07 |
| **Bayfield** | 935.8 | 780.1 | 39.6 | 740.5 | 79 | 83 | 0.96 |
| **Burnett** | 523.3 | 335.9 | 18.8 | 317.1 | 61 | 64 | 1.46 |
| **Douglas** | 835.5 | 640.3 | 12.4 | 627.9 | 75 | 77 | 1.04 |
| **Iron** | 481.0 | 400.1 | 22.2 | 377.9 | 79 | 83 | 1.34 |
| **Polk** | 588.4 | 230.0 | 9.2 | 220.8 | 38 | 39 | 1.75 |
| **Price** | 803.8 | 598.4 | 47.6 | 550.8 | 69 | 74 | 1.11 |
| **Rusk** | 584.4 | 373.2 | 10.1 | 363.1 | 62 | 64 | 1.37 |
| **Sawyer** | 803.3 | 638.9 | 31.2 | 607.7 | 76 | 80 | 1.06 |
| **Taylor** | 624.2 | 368.0 | 13.6 | 354.4 | 57 | 59 | 1.38 |
| **Washburn** | 521.4 | 331.5 | 3.4 | 328.1 | 63 | 64 | 1.44 |
| **All counties** | 7,925.4 | 5,431.2 | 280.4 | 5,150.8 | 65 | 69 | 0.36 |
| **CENTRAL UNIT** |  |  |  |  |  |  |  |
| **Adams** | 414.7 | 236.7 | 2.4 | 234.3 | 57 | 57 | 1.24 |
| **Chippewa** | 650.9 | 232.4 | 6.7 | 225.7 | 35 | 36 | 1.26 |
| **Clark** | 779.6 | 316.1 | -- | 316.1 | 41 | 41 | 1.07 |
| **Eau Claire** | 408.3 | 156.3 | 1.8 | 154.5 | 38 | 38 | 1.53 |
| **Jackson** | 638.6 | 378.9 | 7.5 | 371.4 | 58 | 59 | 0.98 |
| **Juneau** | 495.5 | 256.0 | 3.9 | 252.1 | 51 | 52 | 1.19 |
| **Marathon** | 997.9 | 365.4 | 6.9 | 358.5 | 36 | 37 | 1.00 |
| **Marquette** | 290.9 | 94.3 | -- | 94.3 | 32 | 32 | 1.95 |
| **Monroe** | 578.3 | 247.3 | 2.3 | 245.0 | 42 | 43 | 1.21 |
| **Portage** | 518.5 | 174.3 | -- | 174.3 | 34 | 34 | 1.44 |
| **Waupaca** | 482.8 | 181.1 | 8.5 | 172.6 | 36 | 38 | 1.44 |
| **Waushara** | 401.7 | 157.2 | 11.6 | 145.6 | 36 | 39 | 1.57 |
| **Wood** | 512.5 | 206.5 | -- | 206.5 | 40 | 40 | 1.32 |
| **All counties** | 7,170.2 | 3,002.5 | 51.6 | 2,950.9 | 41 | 42 | 0.35 |

(Table 4 continued on next page)

[1] 1980 Bureau of the Census estimates.

[2] Land at least 16.7 percent stocked by forest trees of any size, or formerly having such tree cover; excludes land currently developed for nonforest use such as urban or heavily settled residential or resort areas, city parks, orchards, improved roads, or improved pasture land. The minimum forest area classified was 1 acre. Classified as forest were roadside, streamside, and shelterbelt strips of timber with a crown width of at least 120 feet and unimproved roads and trails, streams, and clearings in forested areas if less than 120 feet wide.

[3] Unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions, and productive public forest land withdrawn from commercial timber production through statute or administrative regulation.

[4] Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation.

(Table 4 continued)

| County | All land[1] | Forest land[2] All forest | Forest land[2] Noncommercial[3] | Forest land[2] Commercial[4] | Commercial forest as a percent of land area | All forest as a percent of land area | Sampling error for commercial forest land (percent) |
|---|---|---|---|---|---|---|---|
| SOUTHWEST UNIT | | | | | | | |
| Buffalo | 447.6 | 193.4 | 5.5 | 187.9 | 42 | 43 | 1.26 |
| Crawford | 362.1 | 168.8 | 1.0 | 167.8 | 46 | 47 | 1.34 |
| Dunn | 546.2 | 171.1 | 1.1 | 170.0 | 31 | 31 | 1.33 |
| Grant | 732.2 | 186.4 | 1.9 | 184.5 | 25 | 26 | 1.27 |
| Iowa | 486.5 | 140.7 | 4.7 | 136.0 | 28 | 29 | 1.48 |
| La Crosse | 292.6 | 121.6 | -- | 121.6 | 42 | 42 | 1.57 |
| Lafayette | 405.9 | 38.2 | 0.6 | 37.6 | 9 | 9 | 2.82 |
| Pepin | 147.8 | 53.9 | 0.5 | 53.4 | 36 | 37 | 2.37 |
| Pierce | 369.0 | 102.1 | 1.5 | 100.6 | 27 | 28 | 1.72 |
| Richland | 374.1 | 159.4 | 0.7 | 158.7 | 42 | 43 | 1.37 |
| St.Croix | 462.5 | 77.7 | 4.8 | 72.9 | 16 | 17 | 2.03 |
| Sauk | 536.2 | 192.0 | 10.3 | 181.7 | 34 | 36 | 1.28 |
| Tempealeau | 470.9 | 151.1 | 4.1 | 147.0 | 31 | 32 | 1.43 |
| Vernon | 516.9 | 202.4 | 2.1 | 200.3 | 39 | 39 | 1.22 |
| All counties | 6,150.5 | 1,958.8 | 38.8 | 1,920.0 | 31 | 32 | 0.39 |
| SOUTHEAST UNIT | | | | | | | |
| Brown | 335.5 | 49.1 | 1.7 | 47.4 | 14 | 15 | 1.83 |
| Calumet | 208.9 | 25.1 | 0.4 | 24.7 | 12 | 12 | 2.54 |
| Columbia | 493.5 | 84.4 | 0.2 | 84.2 | 17 | 17 | 1.37 |
| Dane | 770.9 | 91.1 | 0.9 | 90.2 | 12 | 12 | 1.32 |
| Dodge | 567.9 | 27.8 | 0.2 | 27.6 | 5 | 5 | 2.39 |
| Door | 314.5 | 120.0 | 13.7 | 106.3 | 34 | 38 | 1.22 |
| Fond du Lac | 463.8 | 35.1 | 1.2 | 33.9 | 7 | 8 | 2.16 |
| Green | 373.3 | 30.9 | -- | 30.9 | 8 | 8 | 2.26 |
| Green Lake | 228.2 | 21.0 | -- | 21.0 | 9 | 9 | 2.74 |
| Jefferson | 359.6 | 29.3 | 0.3 | 29.0 | 8 | 8 | 2.34 |
| Kenosha | 174.5 | 11.7 | 0.9 | 10.8 | 6 | 7 | 3.83 |
| Kewaunee | 219.5 | 36.8 | -- | 36.8 | 17 | 17 | 2.07 |
| Manitowoc | 380.1 | 57.4 | 0.9 | 56.5 | 15 | 15 | 1.67 |
| Milwaukee | 154.6 | -- | -- | -- | -- | -- | [5] |
| Outagamie | 411.0 | 70.7 | -- | 70.7 | 17 | 17 | 1.49 |
| Ozaukee | 150.3 | 16.3 | -- | 16.3 | 11 | 11 | 3.12 |
| Racine | 214.1 | 17.7 | 0.8 | 16.9 | 8 | 8 | 3.06 |
| Rock | 463.0 | 28.1 | 1.2 | 26.9 | 6 | 6 | 2.43 |
| Sheboygan | 329.8 | 52.6 | 1.1 | 51.5 | 16 | 16 | 1.74 |
| Walworth | 355.6 | 35.8 | 0.2 | 35.6 | 10 | 10 | 2.10 |
| Washington | 275.5 | 45.8 | 0.1 | 45.7 | 17 | 17 | 1.85 |
| Waukesha | 354.8 | 36.6 | 4.5 | 32.1 | 9 | 10 | 2.22 |
| Winnebago | 287.6 | 14.2 | -- | 14.2 | 5 | 5 | 3.34 |
| All counties | 7,886.5 | 937.5 | 28.3 | 909.2 | 12 | 12 | 0.42 |
| State total | 34,832.8 | 15,351.3 | 591.9 | 14,759.4 | 42 | 44 | 0.22 |

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[1] 1980 Bureau of the Census estimates.

[2] Land at least 16.7 percent stocked by forest trees of any size, or formerly having such tree cover; excludes land currently developed for nonforest use such as urban or heavily settled residential or resort areas, city parks, orchards, improved roads, or improved pasture land. The minimum forest area classified was 1 acre. Classified as forest were roadside, streamside, and shelterbelt strips of timber with a crown width of at least 120 feet and unimproved roads and trails, streams, and clearings in forested areas if less than 120 feet wide.

[3] Unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions, and productive public forest land withdrawn from commercial timber production through statute or administrative regulation.

[4] Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation.

[5] There was no data in this cell.

Table 5.--Area of commercial forest land by ownership class and site class, Wisconsin, 1983

(In thousand acres)

| Ownership class | All classes | Site class (cubic feet of growth per acre per year) 225+ | 165-224 | 120-164 | 85-119 | 50-84 | 20-49 |
|---|---|---|---|---|---|---|---|
| National Forest | 1,242.3 | -- | -- | 65.2 | 376.9 | 575.0 | 225.2 |
| Miscellaneous federal | 176.2 | -- | -- | -- | 32.9 | 70.6 | 72.7 |
| State | 569.4 | -- | -- | 17.4 | 98.1 | 241.1 | 212.8 |
| County and municipal | 2,179.8 | -- | -- | 41.0 | 434.1 | 1,029.9 | 674.8 |
| Indian | 353.7 | -- | -- | 10.9 | 81.6 | 190.7 | 70.5 |
| Forest industry | 1,156.0 | -- | -- | 24.9 | 229.2 | 486.9 | 415.0 |
| Farmer | 3,513.7 | -- | -- | 117.4 | 833.3 | 1,450.1 | 1,112.9 |
| Misc. private-corp. | 665.9 | -- | 2.2 | 15.6 | 136.8 | 295.4 | 215.9 |
| Misc. private-indiv. | 4,902.4 | -- | 4.2 | 161.9 | 1,042.7 | 2,166.3 | 1,527.3 |
| All owners | 14,759.4 | -- | 6.4 | 454.3 | 3,265.6 | 6,506.0 | 4,527.1 |

Table 6.--Area of commercial forest land by ownership class and stand-volume class, Wisconsin, 1983

(In thousand acres)

| Ownership class | All classes | Stand-volume class (board feet[1/]) Less than 1,500 | 1,500 to 5,000 | 5,000+ |
|---|---|---|---|---|
| National Forest | 1,242.3 | 480.3 | 599.3 | 162.7 |
| Miscellaneous federal | 176.2 | 104.9 | 52.4 | 18.9 |
| State | 569.4 | 275.3 | 216.5 | 77.6 |
| County and municipal | 2,179.8 | 1,187.7 | 812.2 | 179.9 |
| Indian | 353.7 | 71.7 | 118.7 | 163.3 |
| Forest industry | 1,156.0 | 538.2 | 422.9 | 194.9 |
| Farmer | 3,513.7 | 1,406.4 | 1,468.8 | 638.5 |
| Misc. private-corp. | 665.9 | 284.4 | 301.7 | 79.8 |
| Misc. private-indiv. | 4,902.4 | 2,338.1 | 1,938.8 | 625.5 |
| All owners | 14,759.4 | 6,687.0 | 5,931.3 | 2,141.1 |

[1/] International ¼-inch rule.

Table 7.--Area of privately owned commercial forest land by ownership class, owner tenure, and size of holding, Wisconsin, 1983

(In thousand acres)

| Ownership class and owner tenure class | All sizes | Size of holding (acres) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1-4 | 5-10 | 11-20 | 21-50 | 51-100 | 101-500 | 501-1,500 | 2,501-5,000 | 5,001+ |
| Forest Industry | | | | | | | | | | |
| 1-4 years | 78.6 | -- | -- | -- | -- | 3.5 | 1.9 | 11.2 | 1.8 | 60.2 |
| 5-9 years | 134.1 | -- | -- | -- | -- | 4.2 | 2.0 | 9.2 | 1.7 | 117.0 |
| 10-19 years | 331.1 | -- | -- | -- | 5.0 | -- | 2.0 | 14.4 | 7.1 | 302.6 |
| 20+ years | 612.2 | -- | -- | -- | -- | 2.3 | 2.3 | 3.6 | 5.3 | 598.7 |
| All classes | 1,156.0 | -- | -- | -- | 5.0 | 10.0 | 8.2 | 38.4 | 15.9 | 1,078.5 |
| Farmer | | | | | | | | | | |
| 1-4 years | 644.3 | 2.5 | 11.1 | 69.6 | 156.8 | 171.2 | 219.7 | 10.2 | 3.2 | -- |
| 5-9 years | 688.5 | 15.8 | 16.3 | 71.0 | 186.3 | 184.5 | 200.7 | 13.9 | -- | -- |
| 10-19 years | 1,141.2 | 17.2 | 33.5 | 103.1 | 294.1 | 309.6 | 369.2 | 12.7 | 1.8 | -- |
| 20+ years | 1,039.7 | 16.6 | 40.5 | 103.6 | 264.4 | 289.2 | 312.6 | 11.1 | 1.7 | -- |
| All classes | 3,513.7 | 52.1 | 101.4 | 347.3 | 901.6 | 954.5 | 1,102.2 | 47.9 | 6.7 | -- |
| Miscellaneous private corporation | | | | | | | | | | |
| 1-4 years | 135.7 | 3.2 | 2.4 | -- | 33.7 | 22.9 | 37.8 | 11.2 | 1.8 | 22.7 |
| 5-9 years | 101.7 | -- | -- | -- | 16.9 | 16.5 | 35.5 | 18.9 | 4.1 | 9.8 |
| 10-19 years | 155.9 | 2.5 | 4.8 | -- | 14.8 | 34.4 | 44.6 | 32.0 | 7.0 | 15.8 |
| 20+ years | 272.6 | -- | -- | 3.9 | 15.1 | 21.6 | 62.9 | 78.3 | 24.9 | 65.9 |
| All classes | 665.9 | 5.7 | 7.2 | 3.9 | 80.5 | 95.4 | 180.8 | 140.4 | 37.8 | 114.2 |
| Miscellaneous private individual | | | | | | | | | | |
| 1-4 years | 1,260.6 | 30.3 | 60.3 | 98.7 | 452.7 | 314.3 | 286.9 | 13.7 | 1.8 | 1.9 |
| 5-9 years | 1,186.5 | 38.0 | 66.2 | 96.9 | 389.1 | 293.8 | 279.9 | 22.6 | -- | -- |
| 10-19 years | 1,434.2 | 37.3 | 58.3 | 82.6 | 438.4 | 340.9 | 411.7 | 61.6 | 3.4 | -- |
| 20+ years | 1,021.1 | 16.6 | 22.6 | 54.5 | 303.0 | 266.3 | 307.5 | 47.7 | -- | 2.9 |
| All classes | 4,902.4 | 122.2 | 207.4 | 332.7 | 1,583.2 | 1,215.3 | 1,286.0 | 145.6 | 5.2 | 4.8 |
| All private owners | | | | | | | | | | |
| 1-4 years | 2,119.2 | 36.0 | 73.8 | 168.3 | 643.2 | 511.9 | 546.3 | 46.3 | 8.6 | 84.8 |
| 5-9 years | 2,110.8 | 53.8 | 82.5 | 167.9 | 592.3 | 499.0 | 518.1 | 64.6 | 5.8 | 126.8 |
| 10-19 years | 3,062.4 | 57.0 | 96.6 | 185.7 | 752.3 | 684.9 | 827.5 | 120.7 | 19.3 | 318.4 |
| 20+ years | 2,945.6 | 33.2 | 63.1 | 162.0 | 582.5 | 579.4 | 685.3 | 140.7 | 31.9 | 667.5 |
| All classes | 10,238.0 | 180.0 | 316.0 | 683.9 | 2,570.3 | 2,275.2 | 2,577.2 | 372.3 | 65.6 | 1,197.5 |

Table 8.--Area of commercial forest land by forest type, stand-size class, and ownership class, Wisconsin, 1983

(In thousand acres)

| Forest type and stand-size class | All owners | Ownership class | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | National Forest | Misc. federal | State | County & municipal | Indian | Forest industry | Farmer | Misc. priv.-corp. | Misc. priv.-indiv. |
| Jack pine | | | | | | | | | | |
| Sawtimber | 93.9 | 5.2 | 4.3 | 3.5 | 20.0 | 4.0 | 9.1 | 14.5 | 4.2 | 29.1 |
| Poletimber | 281.0 | 44.6 | 8.9 | 12.1 | 73.4 | 1.6 | 35.0 | 21.2 | 6.5 | 77.7 |
| Sapling & seedling | 171.6 | 0.5 | 11.4 | 17.8 | 43.8 | -- | 25.0 | 8.9 | 10.2 | 54.0 |
| All stands | 546.5 | 50.3 | 24.6 | 33.4 | 137.2 | 5.6 | 69.1 | 44.6 | 20.9 | 160.8 |
| Red pine | | | | | | | | | | |
| Sawtimber | 159.2 | 70.6 | 2.1 | 14.6 | 18.2 | 5.4 | 5.4 | 9.8 | 5.9 | 27.2 |
| Poletimber | 193.9 | 9.3 | -- | 10.9 | 39.2 | 3.5 | 13.6 | 23.5 | 17.3 | 76.6 |
| Sapling & seedling | 125.1 | 23.5 | 6.9 | 3.6 | 23.4 | -- | 30.7 | 1.9 | 7.2 | 27.9 |
| All stands | 478.2 | 103.4 | 9.0 | 29.1 | 80.8 | 8.9 | 49.7 | 35.2 | 30.4 | 131.7 |
| White pine | | | | | | | | | | |
| Sawtimber | 157.6 | 15.2 | 2.2 | 4.0 | 20.5 | 15.6 | 11.8 | 37.2 | 9.7 | 41.4 |
| Poletimber | 43.9 | -- | 2.2 | 3.4 | 1.7 | 1.8 | 1.7 | 5.0 | 5.3 | 22.8 |
| Sapling & seedling | 24.1 | -- | 2.5 | 2.2 | 2.2 | -- | 3.4 | 6.8 | -- | 7.0 |
| All stands | 225.6 | 15.2 | 6.9 | 9.6 | 24.4 | 17.4 | 16.9 | 49.0 | 15.0 | 71.2 |
| Balsam fir | | | | | | | | | | |
| Sawtimber | 116.9 | 20.9 | -- | 5.4 | 19.9 | 2.0 | 15.9 | 11.2 | 2.3 | 39.3 |
| Poletimber | 184.4 | 38.6 | -- | 10.9 | 35.2 | 2.1 | 10.6 | 5.8 | 9.0 | 72.2 |
| Sapling & seedling | 118.1 | 6.5 | -- | 5.4 | 16.5 | -- | 15.6 | 18.6 | 5.5 | 50.0 |
| All stands | 419.4 | 66.0 | -- | 21.7 | 71.6 | 4.1 | 42.1 | 35.6 | 16.8 | 161.5 |
| White spruce | | | | | | | | | | |
| Sawtimber | 23.0 | 19.3 | -- | -- | -- | -- | 2.0 | -- | -- | 1.7 |
| Poletimber | 20.2 | 8.7 | -- | -- | -- | -- | 1.7 | -- | 2.1 | 7.7 |
| Sapling & seedling | 18.2 | 3.2 | -- | 1.7 | 1.8 | -- | 2.0 | -- | -- | 9.5 |
| All stands | 61.4 | 31.2 | -- | 1.7 | 1.8 | -- | 5.7 | -- | 2.1 | 18.9 |
| Black spruce | | | | | | | | | | |
| Sawtimber | 7.3 | -- | -- | 1.7 | 3.8 | -- | -- | -- | -- | 1.8 |
| Poletimber | 82.0 | 15.7 | -- | 8.4 | 18.2 | 3.6 | 10.6 | 2.0 | -- | 23.5 |
| Sapling & seedling | 183.7 | 20.8 | 2.2 | 18.0 | 36.9 | -- | 27.7 | 17.2 | 5.3 | 55.6 |
| All stands | 273.0 | 36.5 | 2.2 | 28.1 | 58.9 | 3.6 | 38.3 | 19.2 | 5.3 | 80.9 |
| Northern white-cedar | | | | | | | | | | |
| Sawtimber | 115.3 | 9.0 | -- | 13.5 | 17.7 | 5.3 | 21.6 | 7.8 | 4.4 | 36.0 |
| Poletimber | 206.9 | 52.9 | -- | 5.4 | 21.3 | 10.8 | 12.9 | 33.2 | 5.8 | 64.6 |
| Sapling & seedling | 48.5 | 3.7 | -- | -- | 7.2 | 1.7 | 3.5 | 16.7 | 1.8 | 13.9 |
| All stands | 370.7 | 65.6 | -- | 18.9 | 46.2 | 17.8 | 38.0 | 57.7 | 12.0 | 114.5 |

(Table 8 continued on next page)

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(Table 8 continued)

| Forest type and stand-size class | All owners | National Forest | Misc. federal | State | County & municipal | Indian | Forest industry | Farmer | Misc. priv.-corp. | Misc. priv.-indiv. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Ownership class | | | | | | | | |
| Tamarack | | | | | | | | | | |
| Sawtimber | 15.3 | -- | -- | 2.1 | -- | -- | 3.7 | 4.0 | 1.8 | 3.7 |
| Poletimber | 89.0 | 15.5 | -- | 5.4 | 10.2 | -- | 5.4 | 11.1 | 1.7 | 39.7 |
| Sapling & seedling | 118.4 | 1.4 | -- | 14.7 | 11.3 | 1.6 | 7.1 | 26.3 | 10.2 | 45.8 |
| All stands | 222.7 | 16.9 | -- | 22.2 | 21.5 | 1.6 | 16.2 | 41.4 | 13.7 | 89.2 |
| Oak-hickory | | | | | | | | | | |
| Sawtimber | 1,526.5 | -- | 8.8 | 31.6 | 29.5 | 17.9 | 14.5 | 877.8 | 80.6 | 465.8 |
| Poletimber | 841.8 | 42.9 | 22.4 | 19.9 | 127.4 | 3.4 | 17.2 | 266.8 | 44.7 | 297.1 |
| Sapling & seedling | 490.4 | 2.3 | 15.4 | 17.4 | 67.6 | 1.8 | 46.4 | 118.0 | 21.3 | 200.2 |
| All stands | 2,858.7 | 45.2 | 46.6 | 68.9 | 224.5 | 23.1 | 78.1 | 1,262.6 | 146.6 | 963.1 |
| Elm-ash-soft maple | | | | | | | | | | |
| Sawtimber | 415.4 | 1.8 | 19.3 | 23.7 | 50.6 | 9.2 | 24.4 | 142.1 | 21.8 | 122.5 |
| Poletimber | 524.8 | 19.8 | 5.6 | 18.4 | 87.8 | 3.9 | 40.1 | 135.2 | 16.1 | 197.9 |
| Sapling & seedling | 300.4 | 3.7 | 2.8 | 18.2 | 31.2 | 1.8 | 22.3 | 80.3 | 21.3 | 118.8 |
| All stands | 1,240.6 | 25.3 | 27.7 | 60.3 | 169.6 | 14.9 | 86.8 | 357.6 | 59.2 | 439.2 |
| Maple-birch | | | | | | | | | | |
| Sawtimber | 1,543.8 | 112.0 | 5.2 | 51.4 | 114.2 | 120.1 | 193.9 | 449.0 | 62.0 | 436.0 |
| Poletimber | 1,749.4 | 316.3 | -- | 36.7 | 271.6 | 41.0 | 195.9 | 251.4 | 79.7 | 556.8 |
| Sapling & seedling | 703.7 | 3.8 | 2.2 | 21.8 | 81.3 | 3.4 | 50.8 | 257.7 | 13.7 | 269.0 |
| All stands | 3,996.9 | 432.1 | 7.4 | 109.9 | 467.1 | 164.5 | 440.6 | 958.1 | 155.4 | 1,261.8 |
| Aspen | | | | | | | | | | |
| Sawtimber | 401.6 | 14.5 | 6.4 | 20.1 | 62.2 | 14.8 | 27.0 | 84.2 | 14.6 | 157.8 |
| Poletimber | 1,585.9 | 149.3 | 17.6 | 50.5 | 358.4 | 49.4 | 88.3 | 231.5 | 74.1 | 566.8 |
| Sapling & seedling | 1,274.0 | 152.1 | 16.2 | 69.4 | 323.2 | 18.8 | 107.1 | 157.3 | 55.9 | 374.0 |
| All stands | 3,261.5 | 315.9 | 40.2 | 140.0 | 743.8 | 83.0 | 222.4 | 473.0 | 144.6 | 1,098.6 |
| Paper birch | | | | | | | | | | |
| Sawtimber | 78.9 | 0.6 | -- | 1.6 | 6.2 | -- | 1.9 | 28.5 | 1.7 | 38.4 |
| Poletimber | 420.2 | 32.8 | 3.8 | 16.9 | 82.2 | 5.4 | 35.9 | 63.3 | 34.5 | 145.4 |
| Sapling & seedling | 142.5 | 5.3 | 2.3 | 1.8 | 27.7 | -- | 1.8 | 51.4 | 2.4 | 49.8 |
| All stands | 641.6 | 38.7 | 6.1 | 20.3 | 116.1 | 5.4 | 39.6 | 143.2 | 38.6 | 233.6 |
| Exotic | | | | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 2.2 | -- | -- | -- | -- | -- | -- | -- | -- | 2.2 |
| All stands | 2.2 | -- | -- | -- | -- | -- | -- | -- | -- | 2.2 |
| Nonstocked | 160.4 | -- | 5.5 | 5.3 | 16.3 | 3.8 | 12.5 | 36.5 | 5.3 | 75.2 |
| All types | | | | | | | | | | |
| Sawtimber | 4,654.7 | 269.1 | 48.3 | 173.2 | 362.8 | 194.3 | 331.2 | 1,666.1 | 209.0 | 1,400.7 |
| Poletimber | 6,223.4 | 746.4 | 60.5 | 198.9 | 1,126.6 | 126.5 | 468.9 | 1,050.0 | 296.8 | 2,148.8 |
| Sapling & seedling | 3,720.9 | 226.8 | 61.9 | 192.0 | 674.1 | 29.1 | 343.4 | 761.1 | 154.8 | 1,277.7 |
| Nonstocked | 160.4 | -- | 5.5 | 5.3 | 16.3 | 3.8 | 12.5 | 36.5 | 5.3 | 75.2 |
| All stands | 14,759.4 | 1,242.3 | 176.2 | 569.4 | 2,179.8 | 353.7 | 1,156.0 | 3,513.7 | 665.9 | 4,902.4 |

Table 9.--Area of commercial forest land by forest type and Forest Survey Unit, Wisconsin, 1983

(In thousand acres)

| Forest type | All Units | Forest Survey Unit | | | | |
|---|---|---|---|---|---|---|
| | | Northeast | Northwest | Central | Southwest | Southeast |
| Jack pine | 546.5 | 81.7 | 247.8 | 203.1 | 11.2 | 2.7 |
| Red pine | 478.2 | 157.8 | 132.6 | 135.5 | 40.1 | 12.2 |
| White pine | 225.6 | 81.1 | 36.5 | 77.9 | 13.7 | 16.4 |
| Balsam fir | 419.4 | 187.9 | 219.6 | 11.9 | -- | -- |
| White spruce | 61.4 | 19.8 | 31.9 | 2.2 | 2.5 | 5.0 |
| Black spruce | 273.0 | 147.5 | 111.2 | 11.6 | -- | 2.7 |
| Northern white-cedar | 370.7 | 186.0 | 107.8 | 23.3 | -- | 53.6 |
| Tamarack | 222.7 | 63.0 | 111.5 | 39.0 | -- | 9.2 |
| Oak-hickory | 2,858.7 | 149.3 | 415.6 | 937.6 | 1,063.4 | 292.8 |
| Elm-ash-soft maple | 1,240.6 | 235.9 | 414.9 | 271.5 | 117.8 | 200.5 |
| Maple-birch | 3,996.9 | 1,280.2 | 1,478.7 | 506.2 | 497.9 | 233.9 |
| Aspen | 3,261.5 | 1,026.7 | 1,508.3 | 577.5 | 85.7 | 63.3 |
| Paper birch | 641.6 | 191.5 | 268.8 | 118.6 | 54.4 | 8.3 |
| Exotic | 2.2 | -- | -- | 2.2 | -- | -- |
| Nonstocked | 160.4 | 20.1 | 65.6 | 32.8 | 33.3 | 8.6 |
| All types | 14,759.4 | 3,828.5 | 5,150.8 | 2,950.9 | 1,920.0 | 909.2 |

### Table 10.--Area of commercial forest land by county, stand-size class, and Forest Survey Unit, Wisconsin, 1983

(In thousand acres)

| County | All stands | Stand-size class | | | |
|---|---|---|---|---|---|
| | | Sawtimber stands | Poletimber stands | Sapling and seedling stands | Nonstocked areas |
| **NORTHEAST UNIT** | | | | | |
| Florence | 244.0 | 83.3 | 111.9 | 45.2 | 3.6 |
| Forest | 492.7 | 149.7 | 258.4 | 84.6 | -- |
| Langlade | 374.5 | 85.8 | 215.8 | 72.9 | -- |
| Lincoln | 393.8 | 61.1 | 195.8 | 135.0 | 1.9 |
| Menominee | 213.1 | 145.0 | 54.0 | 12.3 | 1.8 |
| Marinette | 639.7 | 136.0 | 309.5 | 192.4 | 1.8 |
| Oconto | 347.1 | 84.5 | 184.9 | 72.1 | 5.6 |
| Oneida | 497.1 | 93.9 | 211.3 | 188.5 | 3.4 |
| Shawano | 255.2 | 98.0 | 115.9 | 39.3 | 2.0 |
| Vilas | 371.3 | 115.5 | 166.8 | 89.0 | -- |
| All counties | 3,828.5 | 1,052.8 | 1,824.3 | 931.3 | 20.1 |
| **NORTHWEST UNIT** | | | | | |
| Ashland | 503.8 | 135.9 | 263.6 | 104.3 | -- |
| Barron | 158.7 | 57.5 | 64.4 | 34.5 | 2.3 |
| Bayfield | 740.5 | 144.0 | 407.2 | 187.5 | 1.8 |
| Burnett | 317.1 | 74.5 | 133.3 | 101.7 | 7.6 |
| Douglas | 627.9 | 106.5 | 301.7 | 210.3 | 9.4 |
| Iron | 377.9 | 108.5 | 192.0 | 77.4 | -- |
| Polk | 220.8 | 64.7 | 98.4 | 57.7 | -- |
| Price | 550.8 | 97.9 | 256.6 | 183.8 | 12.5 |
| Rusk | 363.1 | 103.0 | 192.4 | 63.7 | 4.0 |
| Sawyer | 607.7 | 162.1 | 312.9 | 117.2 | 15.5 |
| Taylor | 354.4 | 52.0 | 179.4 | 112.2 | 10.8 |
| Washburn | 328.1 | 45.9 | 183.6 | 96.9 | 1.7 |
| All counties | 5,150.8 | 1,152.5 | 2,585.5 | 1,347.2 | 65.6 |
| **CENTRAL UNIT** | | | | | |
| Adams | 234.3 | 47.2 | 82.1 | 100.2 | 4.8 |
| Chippewa | 225.7 | 66.0 | 84.1 | 68.1 | 7.5 |
| Clark | 316.1 | 71.1 | 129.1 | 113.5 | 2.4 |
| Eau Clarie | 154.5 | 35.7 | 90.5 | 28.3 | -- |
| Jackson | 371.4 | 92.3 | 155.8 | 123.3 | -- |
| Juneau | 252.1 | 81.8 | 105.7 | 64.6 | -- |
| Marathon | 358.5 | 114.5 | 143.5 | 93.6 | 6.9 |
| Marquette | 94.3 | 38.1 | 22.6 | 31.4 | 2.2 |
| Monroe | 245.0 | 99.5 | 88.8 | 52.1 | 4.6 |
| Portage | 174.3 | 50.3 | 65.6 | 56.2 | 2.2 |
| Waupaca | 172.6 | 95.6 | 51.3 | 25.7 | -- |
| Waushara | 145.6 | 38.1 | 64.8 | 40.5 | 2.2 |
| Wood | 206.5 | 52.3 | 68.2 | 86.0 | -- |
| All counties | 2,950.9 | 882.5 | 1,152.1 | 883.5 | 32.8 |

(Table 10 continued on next page)

(Table 10 continued)

SOUTHWEST UNIT

| County | All stands | Stand-size class | | | |
|---|---|---|---|---|---|
| | | Sawtimber stands | Poletimber stands | Sapling and seedling stands | Nonstocked areas |
| Buffalo | 187.9 | 127.1 | 38.5 | 19.5 | 2.8 |
| Crawford | 167.8 | 98.0 | 30.7 | 33.5 | 5.6 |
| Dunn | 170.0 | 75.9 | 57.6 | 36.5 | -- |
| Grant | 184.5 | 133.2 | 30.1 | 21.2 | -- |
| Iowa | 136.0 | 65.5 | 38.1 | 29.7 | 2.7 |
| La Crosse | 121.6 | 86.0 | 19.9 | 15.7 | -- |
| Lafayette | 37.6 | 23.5 | 2.4 | 11.7 | -- |
| Pepin | 53.4 | 30.9 | 11.2 | 11.3 | -- |
| Pierce | 100.6 | 46.7 | 21.8 | 26.9 | 5.2 |
| Richland | 158.7 | 75.1 | 36.2 | 47.4 | -- |
| St. Croix | 72.9 | 11.2 | 31.4 | 21.7 | 8.6 |
| Sauk | 181.7 | 74.5 | 42.4 | 62.3 | 2.5 |
| Trempealeau | 147.0 | 76.2 | 36.6 | 31.5 | 2.7 |
| Vernon | 200.3 | 150.6 | 25.0 | 21.5 | 3.2 |
| All counties | 1,920.0 | 1,074.4 | 421.9 | 390.4 | 33.3 |

SOUTHEAST UNIT

| County | All stands | Sawtimber stands | Poletimber stands | Sapling and seedling stands | Nonstocked areas |
|---|---|---|---|---|---|
| Brown | 47.4 | 27.4 | 10.0 | 10.0 | -- |
| Calumet | 24.7 | 9.9 | 9.9 | 4.9 | -- |
| Columbia | 84.2 | 37.1 | 29.8 | 17.3 | -- |
| Dane | 90.2 | 73.8 | 11.0 | 5.4 | -- |
| Dodge | 27.6 | 16.0 | 4.6 | 7.0 | -- |
| Door | 106.3 | 37.9 | 30.1 | 35.5 | 2.8 |
| Fond du Lac | 33.9 | 21.2 | 4.2 | 8.5 | -- |
| Green | 30.9 | 26.1 | 4.8 | -- | -- |
| Green Lake | 21.0 | 9.4 | 11.6 | -- | -- |
| Jefferson | 29.0 | 23.8 | 2.6 | 2.6 | -- |
| Kenosha | 10.8 | 5.4 | 5.4 | -- | -- |
| Kewaunee | 36.8 | 23.7 | 13.1 | -- | -- |
| Manitowoc | 56.5 | 32.4 | 16.1 | 8.0 | -- |
| Outagamie | 70.7 | 27.9 | 25.0 | 15.3 | 2.5 |
| Ozaukee | 16.3 | 3.2 | 6.6 | 6.5 | -- |
| Racine | 16.9 | 6.8 | -- | 10.1 | -- |
| Rock | 26.9 | 19.5 | 4.9 | 2.5 | -- |
| Sheboygan | 51.5 | 13.6 | 24.5 | 13.4 | -- |
| Walwoth | 35.6 | 35.6 | -- | -- | -- |
| Washington | 45.7 | 12.9 | 19.6 | 9.9 | 3.3 |
| Waukesha | 32.1 | 20.3 | 3.0 | 8.8 | -- |
| Winnebago | 14.2 | 8.6 | 2.8 | 2.8 | -- |
| All counties | 909.2 | 492.5 | 239.6 | 168.5 | 8.6 |
| State total | 14,759.4 | 4,654.7 | 6,223.4 | 3,720.9 | 160.4 |

Table 11.--Area of commercial forest land by forest type, stand-size class, and site class, Wisconsin, 1983

(In thousand acres)

| Forest type and stand-size class | All classes | Site class (cubic feet of growth per acre per year) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 225+ | 165-224 | 120-164 | 85-119 | 50-84 | 20-49 |
| Jack pine | | | | | | | |
| Sawtimber | 93.9 | -- | -- | -- | 7.0 | 51.7 | 35.2 |
| Poletimber | 281.0 | -- | -- | -- | 20.6 | 153.1 | 107.3 |
| Sapling & seedling | 171.6 | -- | -- | 1.9 | 9.8 | 69.9 | 90.0 |
| All stands | 546.5 | -- | -- | 1.9 | 37.4 | 274.7 | 232.5 |
| Red pine | | | | | | | |
| Sawtimber | 159.2 | -- | -- | 45.5 | 69.6 | 39.9 | 4.2 |
| Poletimber | 193.9 | -- | 4.4 | 72.1 | 102.8 | 13.0 | 1.6 |
| Sapling & seedling | 125.1 | -- | -- | 12.3 | 42.8 | 55.1 | 14.9 |
| All stands | 478.2 | -- | 4.4 | 129.9 | 215.2 | 108.0 | 20.7 |
| White pine | | | | | | | |
| Sawtimber | 157.6 | -- | -- | 25.4 | 66.7 | 43.9 | 21.6 |
| Poletimber | 43.9 | -- | -- | 13.6 | 10.7 | 11.8 | 7.8 |
| Sapling & seedling | 24.1 | -- | -- | 1.8 | 11.4 | 10.9 | -- |
| All stands | 225.6 | -- | -- | 40.8 | 88.8 | 66.6 | 29.4 |
| Balsam fir | | | | | | | |
| Sawtimber | 116.9 | -- | -- | 52.5 | 35.7 | 19.8 | 8.9 |
| Poletimber | 184.4 | -- | -- | 50.9 | 73.1 | 38.1 | 22.3 |
| Sapling & seedling | 118.1 | -- | 2.0 | 31.1 | 37.2 | 22.8 | 25.0 |
| All stands | 419.4 | -- | 2.0 | 134.5 | 146.0 | 80.7 | 56.2 |
| White spruce | | | | | | | |
| Sawtimber | 23.0 | -- | -- | -- | 16.4 | 6.6 | -- |
| Poletimber | 20.2 | -- | -- | -- | 10.9 | 9.3 | -- |
| Sapling & seedling | 18.2 | -- | -- | -- | 3.8 | 6.1 | 8.3 |
| All stands | 61.4 | -- | -- | -- | 31.1 | 22.0 | 8.3 |
| Black spruce | | | | | | | |
| Sawtimber | 7.3 | -- | -- | -- | -- | 1.8 | 5.5 |
| Poletimber | 82.0 | -- | -- | -- | 6.8 | 9.6 | 65.6 |
| Sapling & seedling | 183.7 | -- | -- | -- | 8.2 | 12.2 | 163.3 |
| All stands | 273.0 | -- | -- | -- | 15.0 | 23.6 | 234.4 |
| Northern white-cedar | | | | | | | |
| Sawtimber | 115.3 | -- | -- | -- | 4.6 | 32.7 | 78.0 |
| Poletimber | 206.9 | -- | -- | -- | -- | 48.4 | 158.5 |
| Sapling & seedling | 48.5 | -- | -- | -- | -- | 9.7 | 38.8 |
| All stands | 370.7 | -- | -- | -- | 4.6 | 90.8 | 275.3 |

(Table 11 continued on next page)

(Table 11 continued)

| Forest type and stand-size class | All classes | Site class (cubic feet of growth per acre per year) 225+ | 165-224 | 120-164 | 85-119 | 50-84 | 20-49 |
|---|---|---|---|---|---|---|---|
| **Tamarack** | | | | | | | |
| Sawtimber | 15.3 | -- | -- | -- | 1.9 | 5.7 | 7.7 |
| Poletimber | 89.0 | -- | -- | -- | 4.1 | 43.7 | 41.2 |
| Sapling & seedling | 118.4 | -- | -- | -- | 4.1 | 44.3 | 70.0 |
| All stands | 222.7 | -- | -- | -- | 10.1 | 93.7 | 118.9 |
| **Oak-hickory** | | | | | | | |
| Sawtimber | 1,526.5 | -- | -- | 10.0 | 294.8 | 745.5 | 476.2 |
| Poletimber | 841.8 | -- | -- | -- | 137.4 | 473.0 | 231.4 |
| Sapling & seedling | 490.4 | -- | -- | 2.5 | 74.0 | 234.3 | 179.6 |
| All stands | 2,858.7 | -- | -- | 12.5 | 506.2 | 1,452.8 | 887.2 |
| **Elm-ash-soft maple** | | | | | | | |
| Sawtimber | 415.4 | -- | -- | -- | 52.4 | 121.8 | 241.2 |
| Poletimber | 524.8 | -- | -- | -- | 56.8 | 137.9 | 330.1 |
| Sapling & seedling | 300.4 | -- | -- | -- | 13.4 | 74.2 | 212.8 |
| All stands | 1,240.6 | -- | -- | -- | 122.6 | 333.9 | 784.1 |
| **Maple-birch** | | | | | | | |
| Sawtimber | 1,543.8 | -- | -- | 16.5 | 266.2 | 792.7 | 468.4 |
| Poletimber | 1,749.4 | -- | -- | 18.9 | 342.8 | 941.2 | 446.5 |
| Sapling & seedling | 703.7 | -- | -- | 16.0 | 100.9 | 318.7 | 268.1 |
| All stands | 3,996.9 | -- | -- | 51.4 | 709.9 | 2,052.6 | 1,183.0 |
| **Aspen** | | | | | | | |
| Sawtimber | 401.6 | -- | -- | 19.0 | 192.6 | 169.3 | 20.7 |
| Poletimber | 1,585.9 | -- | -- | 35.6 | 686.2 | 744.4 | 119.7 |
| Sapling & seedling | 1,274.0 | -- | -- | 16.7 | 415.3 | 634.8 | 207.2 |
| All stands | 3,261.5 | -- | -- | 71.3 | 1,294.1 | 1,548.5 | 347.6 |
| **Paper birch** | | | | | | | |
| Sawtimber | 78.9 | -- | -- | 5.1 | 15.0 | 31.6 | 27.2 |
| Poletimber | 420.2 | -- | -- | 5.2 | 34.0 | 212.2 | 168.8 |
| Sapling & seedling | 142.5 | -- | -- | -- | 17.6 | 53.2 | 71.7 |
| All stands | 641.6 | -- | -- | 10.3 | 66.6 | 297.0 | 267.7 |
| **Exotic** | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 2.2 | -- | -- | -- | 2.2 | -- | -- |
| All stands | 2.2 | -- | -- | -- | 2.2 | -- | -- |
| **Nonstocked** | 160.4 | -- | -- | 1.7 | 15.8 | 61.1 | 81.8 |
| **All types** | | | | | | | |
| Sawtimber | 4,654.7 | -- | -- | 174.0 | 1,022.9 | 2,063.0 | 1,394.8 |
| Poletimber | 6,223.4 | -- | 4.4 | 196.3 | 1,486.2 | 2,835.7 | 1,700.8 |
| Sapling & seedling | 3,720.9 | -- | 2.0 | 82.3 | 740.7 | 1,546.2 | 1,349.7 |
| Nonstocked | 160.4 | -- | -- | 1.7 | 15.8 | 61.1 | 81.8 |
| All stands | 14,759.4 | -- | 6.4 | 454.3 | 3,265.6 | 6,506.0 | 4,527.1 |

## Table 12.--Area of commercial forest land by forest type and stand-age class, Wisconsin, 1983

(In thousand acres)

| Forest type | All ages | Stand-age class (years) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-140 | 141+ |
| Jack pine | 546.5 | 34.2 | 98.6 | 73.7 | 116.9 | 145.2 | 57.4 | 9.4 | 9.2 | 1.9 | -- | -- | -- | -- |
| Red pine | 478.2 | 53.9 | 104.4 | 108.3 | 97.3 | 54.6 | 23.9 | 7.3 | 7.8 | 7.0 | 10.5 | 3.2 | -- | -- |
| White pine | 225.6 | 12.6 | 18.6 | 10.8 | 18.3 | 22.5 | 22.3 | 24.7 | 30.6 | 31.0 | 4.3 | 10.1 | 8.1 | 11.7 |
| White spruce | 419.4 | 48.9 | 30.7 | 44.6 | 48.4 | 49.5 | 100.8 | 51.6 | 14.1 | 12.9 | 3.5 | 7.5 | 5.0 | 1.9 |
| Balsam fir | 61.4 | 7.1 | 12.7 | 10.7 | 13.9 | 6.5 | 8.5 | 2.0 | -- | -- | -- | -- | -- | -- |
| Black spruce | 273.0 | 29.1 | 41.9 | 71.1 | 35.7 | 27.6 | 14.3 | 14.3 | 24.7 | 8.8 | 3.6 | -- | 1.9 | -- |
| Northern white-cedar | 370.7 | 9.8 | 14.5 | 18.4 | 7.7 | 47.9 | 33.0 | 38.6 | 29.8 | 37.7 | 57.8 | 30.8 | 21.5 | 23.2 |
| Tamarack | 222.7 | 20.7 | 50.4 | 40.2 | 13.6 | 21.5 | 17.1 | 19.4 | 15.8 | 14.9 | 1.7 | 3.8 | 1.8 | 1.8 |
| Oak-hickory | 2,858.7 | 297.3 | 149.0 | 98.2 | 123.6 | 337.6 | 423.5 | 274.6 | 283.1 | 223.8 | 203.0 | 208.9 | 145.8 | 90.1 |
| Elm-ash-soft maple | 1240.6 | 132.0 | 117.9 | 86.0 | 118.9 | 160.6 | 123.6 | 133.1 | 129.7 | 89.2 | 59.9 | 50.2 | 28.7 | 10.8 |
| Maple-birch | 3,996.9 | 304.0 | 273.6 | 232.7 | 258.1 | 612.3 | 681.9 | 479.6 | 241.5 | 239.1 | 201.9 | 215.9 | 128.0 | 128.3 |
| Aspen | 3,261.5 | 651.3 | 451.0 | 312.4 | 471.1 | 702.5 | 404.9 | 154.2 | 71.6 | 37.4 | 5.1 | -- | -- | -- |
| Paper birch | 641.6 | 56.9 | 53.5 | 59.5 | 95.3 | 148.7 | 130.4 | 76.0 | 15.3 | 1.9 | 0.3 | 3.8 | -- | -- |
| Exotic | 2.2 | -- | 2.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 160.4 | 160.4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| All types | 14,759.4 | 1,818.2 | 1,419.0 | 1,166.6 | 1,418.8 | 2,337.0 | 2,041.6 | 1,285.0 | 873.2 | 705.6 | 551.6 | 534.2 | 340.8 | 267.8 |

Table 13.--Area of commercial forest land by forest type, site-index class, and Forest Survey Unit, Wisconsin, 1983

(In thousand acres)

ALL UNITS

| Forest type | All classes | Site-index class (feet) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91+ |
| Jack pine | 546.5 | -- | 1.7 | 8.2 | 72.8 | 174.3 | 202.9 | 74.2 | 10.5 | 1.9 |
| Red pine | 478.2 | -- | -- | 8.6 | 7.6 | 78.9 | 161.8 | 154.3 | 62.6 | 4.4 |
| White pine | 225.6 | -- | -- | 6.4 | 25.7 | 61.7 | 71.1 | 35.0 | 23.1 | 2.6 |
| Balsam fir | 419.4 | 3.2 | 7.0 | 46.0 | 111.7 | 115.0 | 103.6 | 22.1 | 8.8 | 2.0 |
| White spruce | 61.4 | -- | -- | 2.8 | 11.8 | 12.1 | 10.7 | 24.0 | -- | -- |
| Black spruce | 273.0 | -- | 72.1 | 96.2 | 66.1 | 23.6 | 11.6 | 3.4 | -- | -- |
| Northern white-cedar | 370.7 | 6.9 | 116.2 | 97.6 | 73.8 | 42.5 | 29.1 | 2.7 | 1.9 | -- |
| Tamarack | 222.7 | -- | 20.0 | 46.3 | 52.6 | 51.4 | 42.3 | 6.0 | 4.1 | -- |
| Oak-hickory | 2,858.7 | -- | -- | 127.3 | 392.2 | 795.2 | 745.1 | 513.4 | 221.8 | 63.7 |
| Elm-ash-soft maple | 1,240.6 | -- | 7.2 | 75.8 | 192.2 | 355.4 | 300.8 | 186.6 | 101.6 | 21.0 |
| Maple-birch | 3,996.9 | -- | -- | 40.0 | 252.2 | 890.8 | 1,316.4 | 994.1 | 416.3 | 87.1 |
| Aspen | 3,261.5 | -- | -- | 19.1 | 162.4 | 502.5 | 955.1 | 1,099.1 | 452.0 | 71.3 |
| Paper birch | 641.6 | -- | -- | 8.0 | 48.9 | 153.0 | 213.5 | 141.3 | 66.6 | 10.3 |
| Exotic | 2.2 | -- | -- | -- | -- | -- | -- | 2.2 | -- | -- |
| Nonstocked | 160.4 | -- | 3.8 | 17.4 | 28.0 | 46.8 | 31.2 | 25.8 | 4.7 | 2.7 |
| All types | 14,759.4 | 10.1 | 228.0 | 599.7 | 1,498.0 | 3,303.2 | 4,195.2 | 3,284.2 | 1,374.0 | 267.0 |
| NORTHEAST UNIT | | | | | | | | | | |
| Jack pine | 81.7 | -- | 1.7 | 1.6 | 8.8 | 23.0 | 25.7 | 17.5 | 3.4 | -- |
| Red pine | 157.8 | -- | -- | -- | 3.6 | 29.3 | 53.7 | 51.3 | 19.9 | -- |
| White pine | 81.1 | -- | -- | 1.7 | 10.3 | 19.6 | 26.7 | 12.2 | 10.6 | -- |
| Balsam fir | 187.9 | -- | 5.3 | 27.3 | 44.2 | 50.4 | 47.7 | 11.0 | 2.0 | -- |
| White spruce | 19.8 | -- | -- | -- | 5.4 | 8.3 | -- | 6.1 | -- | -- |
| Black spruce | 147.5 | -- | 38.3 | 46.6 | 37.2 | 15.2 | 6.8 | 3.4 | -- | -- |
| Northern white-cedar | 186.0 | 3.4 | 65.9 | 58.2 | 24.9 | 22.7 | 9.0 | -- | 1.9 | -- |
| Tamarack | 63.0 | -- | 7.1 | 18.1 | 10.8 | 25.3 | 1.7 | -- | -- | -- |
| Oak-hickory | 149.3 | -- | -- | -- | 5.3 | 34.0 | 39.2 | 41.7 | 23.4 | 5.7 |
| Elm-ash-soft maple | 235,9 | -- | -- | 24.1 | 39.5 | 77.1 | 58.3 | 18.6 | 18.3 | -- |
| Maple-birch | 1,280.2 | -- | -- | 11.3 | 73.3 | 255.9 | 446.1 | 362.1 | 114.6 | 16.9 |
| Aspen | 1,026.7 | -- | -- | 9.3 | 58.2 | 178.7 | 305.0 | 343.3 | 119.5 | 12.7 |
| Paper birch | 191.5 | -- | -- | -- | 12.5 | 44.4 | 77.2 | 50.0 | 7.4 | -- |
| Exotic | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 20.1 | -- | 2.0 | 1.8 | 5.4 | 5.6 | 1.9 | 3.4 | -- | -- |
| All types | 3,828.5 | 3.4 | 120.3 | 200.0 | 339.4 | 789.5 | 1,099.0 | 920.6 | 321.0 | 35.3 |
| NORTHWEST UNIT | | | | | | | | | | |
| Jack pine | 247.8 | -- | -- | 1.9 | 36.9 | 76.8 | 104.6 | 21.0 | 4.7 | 1.9 |
| Red pine | 132.6 | -- | -- | 1.8 | 1.8 | 30.3 | 57.1 | 33.3 | 8.3 | -- |
| White pine | 36.5 | -- | -- | -- | 3.7 | 20.3 | 9.1 | -- | 3.4 | -- |
| Balsam fir | 219.6 | 3.2 | 1.7 | 18.7 | 60.4 | 62.2 | 53.5 | 11.1 | 6.8 | 2.0 |
| White spruce | 31.9 | -- | -- | -- | 1.7 | 3.8 | 10.7 | 15.7 | -- | -- |
| Black spruce | 111.2 | -- | 33.8 | 47.2 | 21.6 | 3.8 | 4.8 | -- | -- | -- |
| Northern white-cedar | 107.8 | 3.5 | 32.8 | 13.9 | 36.3 | 8.5 | 12.8 | -- | -- | -- |
| Tamarack | 111.5 | -- | 12.9 | 23.7 | 30.6 | 14.5 | 24.5 | 3.6 | 1.7 | -- |
| Oak-hickory | 415.6 | -- | -- | 12.6 | 41.6 | 136.3 | 115.7 | 92.0 | 17.4 | -- |
| Elm-ash-soft maple | 414.9 | -- | 1.8 | 33.1 | 99.5 | 140.0 | 75.2 | 43.8 | 21.5 | -- |
| Maple-birch | 1,478.7 | -- | -- | 12.5 | 88.4 | 346.4 | 528.9 | 356.8 | 129.4 | 16.3 |
| Aspen | 1,508.3 | -- | -- | 4.3 | 54.1 | 190.3 | 437.7 | 550.0 | 247.1 | 24.8 |
| Paper birch | 268.8 | -- | -- | 5.7 | 20.2 | 69.5 | 91.3 | 52.3 | 27.9 | 1.9 |
| Exotic | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 65.6 | -- | 1.8 | 5.6 | 14.5 | 18.5 | 14.4 | 8.9 | 1.9 | -- |
| All types | 5,150.8 | 6.7 | 84.8 | 181.0 | 511.3 | 1,121.2 | 1,540.3 | 1,188.5 | 470.1 | 46.9 |

(Table 13 continued on next page)

(Table 13 continued)

| Forest type | All classes | Site-index class (feet) 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91+ |
|---|---|---|---|---|---|---|---|---|---|---|
| CENTRAL UNIT | | | | | | | | | | |
| Jack pine | 203.1 | -- | -- | 4.7 | 24.6 | 63.1 | 72.6 | 35.7 | 2.4 | -- |
| Red pine | 135.5 | -- | -- | 6.8 | 2.2 | 19.3 | 35.9 | 46.3 | 20.6 | 4.4 |
| White pine | 77.9 | -- | -- | 2.3 | 11.7 | 16.4 | 27.2 | 13.6 | 6.7 | -- |
| Balsam fir | 11.9 | -- | -- | -- | 7.1 | 2.4 | 2.4 | -- | -- | -- |
| White spruce | 2.2 | -- | -- | -- | 2.2 | -- | -- | -- | -- | -- |
| Black spruce | 11.6 | -- | -- | 2.4 | 4.6 | 4.6 | -- | -- | -- | -- |
| Northern white-cedar | 23.3 | -- | 6.9 | 9.4 | 4.6 | -- | 2.4 | -- | -- | -- |
| Tamarack | 39.0 | -- | -- | 4.5 | 11.2 | 11.6 | 6.9 | 2.4 | 2.4 | -- |
| Oak-hickory | 937.6 | -- | -- | 54.6 | 131.8 | 277.5 | 267.5 | 123.7 | 71.3 | 11.2 |
| Elm-ash-soft maple | 271.5 | -- | -- | 2.2 | 23.2 | 78.8 | 94.3 | 47.3 | 25.7 | -- |
| Maple-birch | 506.2 | -- | -- | 4.8 | 26.7 | 118.2 | 176.1 | 106.3 | 60.2 | 13.9 |
| Aspen | 577.5 | -- | -- | -- | 35.2 | 122.8 | 188.2 | 147.2 | 60.8 | 23.3 |
| Paper birch | 118.6 | -- | -- | 2.3 | 13.7 | 25.3 | 28.7 | 25.5 | 20.8 | 2.3 |
| Exotic | 2.2 | -- | -- | -- | -- | -- | -- | 2.2 | -- | -- |
| Nonstocked | 32.8 | -- | -- | 4.5 | 2.3 | 11.9 | 9.2 | 4.9 | -- | -- |
| All types | 2,950.9 | -- | 6.9 | 98.5 | 301.1 | 751.9 | 911.4 | 555.1 | 270.9 | 55.1 |
| SOUTHWEST UNIT | | | | | | | | | | |
| Jack pine | 11.2 | -- | -- | -- | 2.5 | 8.7 | -- | -- | -- | -- |
| Red pine | 40.1 | -- | -- | -- | -- | -- | 12.9 | 13.4 | 13.8 | -- |
| White pine | 13.7 | -- | -- | -- | -- | 2.6 | 5.9 | 2.6 | -- | 2.6 |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White spruce | 2.5 | -- | -- | -- | 2.5 | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Oak-hickory | 1,063.4 | -- | -- | 35.6 | 148.7 | 272.0 | 257.9 | 217.5 | 89.9 | 41.8 |
| Elm-ash-soft maple | 117.8 | -- | -- | 5.3 | 5.6 | 25.1 | 37.1 | 22.8 | 13.2 | 8.7 |
| Maple-birch | 497.9 | -- | -- | 8.9 | 51.4 | 113.5 | 104.1 | 116.6 | 81.1 | 22.3 |
| Aspen | 85.7 | -- | -- | 2.7 | 11.5 | 2.8 | 8.2 | 33.1 | 19.4 | 8.0 |
| Paper birch | 54.4 | -- | -- | -- | -- | 13.8 | 10.5 | 13.5 | 10.5 | 6.1 |
| Exotic | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 33.3 | -- | -- | 5.5 | 2.5 | 5.5 | 5.7 | 8.6 | 2.8 | 2.7 |
| All types | 1,920.0 | -- | -- | 58.0 | 224.7 | 444.0 | 442.3 | 428.1 | 230.7 | 92.2 |
| SOUTHEAST UNIT | | | | | | | | | | |
| Jack pine | 2.7 | -- | -- | -- | -- | 2.7 | -- | -- | -- | -- |
| Red pine | 12.2 | -- | -- | -- | -- | -- | 2.2 | 10.0 | -- | -- |
| White pine | 16.4 | -- | -- | 2.4 | -- | 2.8 | 2.2 | 6.6 | 2.4 | -- |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White spruce | 5.0 | -- | -- | 2.8 | -- | -- | -- | 2.2 | -- | -- |
| Black spruce | 2.7 | -- | -- | -- | 2.7 | -- | -- | -- | -- | -- |
| Northern white-cedar | 53.6 | -- | 10.6 | 16.1 | 8.0 | 11.3 | 4.9 | 2.7 | -- | -- |
| Tamarack | 9.2 | -- | -- | -- | -- | -- | 9.2 | -- | -- | -- |
| Oak-hickroy | 292.8 | -- | -- | 24.5 | 64.8 | 75.4 | 64.8 | 38.5 | 19.8 | 5.0 |
| Elm-ash-soft maple | 200.5 | -- | 5.4 | 11.1 | 24.4 | 34.4 | 35.9 | 54.1 | 22.9 | 12.3 |
| Maple-birch | 233.9 | -- | -- | 2.5 | 12.4 | 56.8 | 61.2 | 52.3 | 31.0 | 17.7 |
| Aspen | 63.3 | -- | -- | 2.8 | 3.4 | 7.9 | 16.0 | 25.5 | 5.2 | 2.5 |
| Paper birch | 8.3 | -- | -- | -- | 2.5 | -- | 5.8 | -- | -- | -- |
| Exotic | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 8.6 | -- | -- | -- | 3.3 | 5.3 | -- | -- | -- | -- |
| All types | 909.2 | -- | 16.0 | 62.2 | 121.5 | 196.6 | 202.2 | 191.9 | 81.3 | 37.5 |

Table 14.--Area of commercial forest land by forest type, stand-size class, and basal-area class, Wisconsin, 1983

(In thousand acres)

| Forest type and stand-size class | All classes | Basal area class (square feet per acre) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| Jack pine | | | | | | | | | | | | | | |
| Sawtimber | 93.9 | -- | -- | -- | 7.9 | 3.6 | 9.8 | 9.5 | 12.8 | 16.1 | 8.0 | 17.2 | 7.2 | 1.8 | -- |
| Poletimber | 281.0 | -- | -- | -- | 4.2 | 10.0 | 22.4 | 22.6 | 51.1 | 44.7 | 64.9 | 38.5 | 18.5 | 1.9 | 2.2 |
| Sapling & seedling | 171.6 | 21.0 | 6.8 | 24.7 | 16.7 | 20.4 | 16.1 | 20.6 | 39.7 | 3.8 | 1.8 | -- | -- | -- | -- |
| All stands | 546.5 | 21.0 | 6.8 | 24.7 | 28.8 | 34.0 | 48.3 | 52.7 | 103.6 | 64.6 | 74.7 | 55.7 | 25.7 | 3.7 | 2.2 |
| Red pine | | | | | | | | | | | | | | | |
| Sawtimber | 159.2 | -- | -- | -- | 2.8 | 2.0 | 1.9 | -- | 7.3 | 9.4 | 11.4 | 46.8 | 43.4 | 27.0 | 7.2 |
| Poletimber | 193.9 | -- | -- | -- | -- | 3.4 | 6.1 | 6.5 | 8.5 | 19.9 | 6.8 | 42.3 | 42.0 | 22.4 | 36.0 |
| Sapling & seedling | 125.1 | 55.5 | 10.7 | 8.6 | 6.0 | 4.6 | 15.8 | -- | 5.7 | 9.9 | 1.6 | 4.2 | 2.5 | -- | -- |
| All stands | 478.2 | 55.5 | 10.7 | 8.6 | 8.8 | 10.0 | 23.8 | 6.5 | 21.5 | 39.2 | 19.8 | 93.3 | 87.9 | 49.4 | 43.2 |
| White pine | | | | | | | | | | | | | | | |
| Sawtimber | 157.6 | -- | 2.5 | 1.9 | 7.6 | 1.7 | 7.6 | 1.7 | 8.8 | 13.5 | 11.9 | 41.2 | 33.5 | 16.8 | 8.9 |
| Poletimber | 43.9 | -- | -- | -- | -- | 1.7 | 2.2 | -- | 5.2 | 6.0 | 5.8 | 13.0 | 5.4 | 4.6 | -- |
| Sapling & seedling | 24.1 | 5.4 | 5.1 | -- | -- | 2.2 | 5.7 | -- | 5.7 | -- | -- | -- | -- | -- | -- |
| All stands | 225.6 | 5.4 | 7.6 | 1.9 | 7.6 | 5.6 | 15.5 | 1.7 | 19.7 | 19.5 | 17.7 | 54.2 | 38.9 | 21.4 | 8.9 |
| Balsam fir | | | | | | | | | | | | | | | |
| Sawtimber | 116.9 | -- | -- | -- | -- | 8.2 | 19.7 | 5.5 | 10.0 | 7.3 | 8.5 | 21.6 | 26.8 | 3.7 | 5.6 |
| Poletimber | 184.4 | -- | -- | 1.8 | -- | 3.5 | 14.6 | 12.1 | 7.5 | 18.7 | 7.3 | 36.6 | 47.8 | 22.0 | 12.5 |
| Sapling & seedling | 118.1 | 11.0 | 10.6 | 13.7 | 7.3 | 13.2 | 13.8 | 17.1 | 17.0 | 1.9 | 5.6 | 3.3 | 1.9 | 1.7 | -- |
| All stands | 419.4 | 11.0 | 10.6 | 15.5 | 7.3 | 24.9 | 48.1 | 34.7 | 34.5 | 27.9 | 21.4 | 61.5 | 76.5 | 27.4 | 18.1 |
| White spruce | | | | | | | | | | | | | | | |
| Sawtimber | 23.0 | -- | -- | -- | -- | -- | -- | 2.7 | -- | -- | -- | -- | -- | 10.3 | 10.0 |
| Poletimber | 20.2 | -- | -- | -- | -- | -- | -- | -- | -- | 3.8 | 2.2 | 1.7 | 8.7 | 3.8 | -- |
| Sapling & seedling | 18.2 | 4.2 | 2.8 | 1.8 | -- | 3.6 | 3.6 | -- | 2.2 | -- | -- | -- | -- | -- | -- |
| All stands | 61.4 | 4.2 | 2.8 | 1.8 | -- | 3.6 | 3.6 | 2.7 | 2.2 | 3.8 | 2.2 | 1.7 | 8.7 | 14.1 | 10.0 |
| Black spruce | | | | | | | | | | | | | | | |
| Sawtimber | 7.3 | -- | 1.9 | -- | -- | -- | -- | 3.6 | -- | -- | -- | -- | 1.8 | -- | -- |
| Poletimber | 82.0 | -- | -- | 3.6 | -- | -- | 9.3 | 7.5 | 13.0 | 8.7 | 17.5 | 7.8 | 12.8 | 1.8 | -- |
| Sapling & seedling | 183.7 | 11.3 | 11.1 | 35.7 | 9.2 | 40.5 | 12.7 | 18.1 | 20.4 | 10.8 | 3.7 | 5.9 | 4.3 | -- | -- |
| All stands | 273.0 | 11.3 | 13.0 | 39.3 | 9.2 | 40.5 | 22.0 | 29.2 | 33.4 | 19.5 | 21.2 | 13.7 | 18.9 | 1.8 | -- |
| Northern white-cedar | | | | | | | | | | | | | | | |
| Sawtimber | 115.3 | -- | -- | -- | -- | 5.3 | 2.0 | 5.3 | 8.6 | 7.5 | 3.5 | 7.6 | 24.9 | 24.9 | 25.7 |
| Poletimber | 206.9 | -- | -- | -- | -- | -- | 1.8 | -- | 8.9 | 11.4 | 1.6 | 43.1 | 30.1 | 61.0 | 49.0 |
| Sapling & seedling | 48.5 | 1.8 | 2.9 | 7.0 | 2.7 | 5.3 | 3.5 | -- | 8.4 | 2.7 | -- | 8.9 | -- | 5.3 | -- |
| All stands | 370.7 | 1.8 | 2.9 | 7.0 | 2.7 | 10.6 | 7.3 | 5.3 | 25.9 | 21.6 | 5.1 | 59.6 | 55.0 | 91.2 | 74.7 |

(Table 14 continued on next page)

(Table 14 continued)

| Forest type and stand-size class | All classes | Basal area class (square feet per acre) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| Tamarack | | | | | | | | | | | | | | | |
| Sawtimber | 15.3 | -- | 1.8 | 4.3 | -- | 1.8 | 3.7 | 1.8 | -- | -- | -- | 1.9 | -- | -- | -- |
| Poletimber | 89.0 | -- | 1.9 | 3.7 | 2.4 | 11.5 | 11.1 | 15.1 | 1.9 | 21.7 | 8.6 | 9.3 | 1.8 | -- | -- |
| Sapling & seedling | 118.4 | 24.3 | 11.8 | 13.4 | 12.6 | 15.7 | 16.6 | 5.8 | 11.0 | 1.8 | 5.4 | -- | -- | -- | -- |
| All stands | 222.7 | 24.3 | 15.5 | 21.4 | 15.0 | 29.0 | 31.4 | 22.7 | 12.9 | 23.5 | 14.0 | 11.2 | 1.8 | -- | -- |
| Oak-hickory | | | | | | | | | | | | | | | |
| Sawtimber | 1,526.5 | -- | 2.4 | 15.4 | 26.8 | 65.4 | 86.5 | 114.3 | 169.7 | 214.5 | 144.2 | 371.4 | 247.7 | 59.3 | 8.9 |
| Poletimber | 841.8 | -- | -- | 3.5 | 7.6 | 8.6 | 77.6 | 47.2 | 100.4 | 122.9 | 109.6 | 178.3 | 134.3 | 46.7 | 5.1 |
| Sapling & seedling | 490.4 | 52.0 | 48.1 | 89.5 | 60.4 | 73.3 | 74.9 | 26.8 | 18.9 | 17.0 | 11.0 | 13.1 | 5.4 | -- | -- |
| All stands | 2,858.7 | 52.0 | 50.5 | 108.4 | 94.8 | 147.3 | 239.0 | 188.3 | 289.0 | 354.4 | 264.8 | 562.8 | 387.4 | 106.0 | 14.0 |
| Elm-ash-soft maple | | | | | | | | | | | | | | | |
| Sawtimber | 415.4 | -- | 4.7 | 15.0 | 18.2 | 20.9 | 38.6 | 16.4 | 30.5 | 43.9 | 37.6 | 71.9 | 74.6 | 33.0 | 10.1 |
| Poletimber | 524.8 | -- | 10.1 | 21.9 | 23.3 | 36.1 | 50.2 | 37.1 | 67.6 | 66.3 | 37.6 | 64.5 | 77.6 | 28.1 | 4.4 |
| Sapling & seedling | 300.4 | 31.8 | 44.3 | 39.3 | 42.5 | 40.0 | 40.6 | 17.5 | 16.7 | 11.7 | 9.1 | 2.4 | 4.5 | -- | -- |
| All stands | 1,240.6 | 31.8 | 59.1 | 76.2 | 84.0 | 97.0 | 129.4 | 71.0 | 114.8 | 121.9 | 84.3 | 138.8 | 156.7 | 61.1 | 14.5 |
| Maple-birch | | | | | | | | | | | | | | | |
| Sawtimber | 1,543.8 | -- | -- | 8.9 | 7.7 | 44.9 | 66.5 | 61.5 | 137.2 | 148.3 | 128.5 | 336.0 | 417.8 | 151.0 | 35.5 |
| Poletimber | 1,749.4 | -- | -- | 4.9 | 19.0 | 37.8 | 77.1 | 81.6 | 156.5 | 244.9 | 155.2 | 422.7 | 386.7 | 140.1 | 22.9 |
| Sapling & seedling | 703.7 | 49.5 | 83.2 | 87.2 | 62.5 | 96.2 | 91.5 | 49.8 | 54.5 | 46.8 | 19.6 | 46.1 | 11.2 | 5.6 | -- |
| All stands | 3,996.9 | 49.5 | 83.2 | 101.0 | 89.2 | 178.9 | 235.1 | 192.9 | 348.2 | 440.0 | 303.3 | 804.8 | 815.7 | 296.7 | 58.4 |
| Aspen | | | | | | | | | | | | | | | |
| Sawtimber | 401.6 | -- | 2.3 | 7.3 | 13.1 | 19.7 | 33.9 | 22.7 | 33.5 | 56.0 | 35.1 | 64.7 | 88.4 | 15.4 | 9.5 |
| Poletimber | 1,585.9 | -- | 9.1 | 29.5 | 30.7 | 102.0 | 142.0 | 147.7 | 170.5 | 227.5 | 147.6 | 250.4 | 241.0 | 71.4 | 16.5 |
| Sapling & seedling | 1,274.0 | 176.5 | 191.2 | 174.1 | 142.6 | 193.0 | 139.3 | 82.7 | 84.6 | 49.2 | 20.1 | 17.1 | 1.8 | 1.8 | -- |
| All stands | 3,261.5 | 176.5 | 202.6 | 210.9 | 186.4 | 314.7 | 315.2 | 253.1 | 288.6 | 332.7 | 202.8 | 332.2 | 331.2 | 88.6 | 26.0 |
| Paper birch | | | | | | | | | | | | | | | |
| Sawtimber | 78.9 | -- | -- | 1.8 | -- | 5.6 | 2.6 | 10.1 | 8.7 | 11.5 | 3.6 | 14.5 | 12.2 | 5.5 | 2.8 |
| Poletimber | 420.2 | -- | -- | 1.9 | 7.8 | 18.2 | 35.2 | 13.4 | 35.9 | 33.6 | 36.1 | 82.7 | 112.2 | 37.7 | 5.5 |
| Sapling & seedling | 142.5 | 9.9 | 22.9 | 14.6 | 13.4 | 23.0 | 19.8 | 12.6 | 5.4 | 6.1 | 5.5 | 7.6 | 1.7 | -- | -- |
| All stands | 641.6 | 9.9 | 22.9 | 18.3 | 21.2 | 46.8 | 57.6 | 36.1 | 50.0 | 51.2 | 45.2 | 104.8 | 126.1 | 43.2 | 8.3 |
| Exotic | | | | | | | | | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 2.2 | -- | -- | -- | -- | -- | -- | -- | 2.2 | -- | -- | -- | -- | -- | -- |
| All stands | 2.2 | -- | -- | -- | -- | -- | -- | -- | 2.2 | -- | -- | -- | -- | -- | -- |
| Nonstocked | 160.4 | 78.4 | 26.4 | 9.2 | 9.8 | 3.5 | 9.2 | 4.4 | 5.6 | -- | 8.8 | 2.7 | 2.4 | -- | -- |
| All types | | | | | | | | | | | | | | | |
| Sawtimber | 4,654.7 | -- | 15.6 | 54.6 | 84.1 | 179.1 | 272.8 | 255.1 | 427.1 | 528.0 | 392.3 | 994.8 | 978.3 | 348.7 | 124.2 |
| Poletimber | 6,223.4 | -- | 21.1 | 70.8 | 95.0 | 232.8 | 449.6 | 390.8 | 627.0 | 830.1 | 600.8 | 1,190.9 | 1,118.9 | 441.5 | 154.1 |
| Sapling & seedling | 3,720.9 | 454.2 | 451.5 | 509.6 | 375.9 | 531.0 | 453.9 | 251.0 | 292.4 | 161.7 | 83.4 | 108.6 | 33.3 | 14.4 | -- |
| Nonstocked | 160.4 | 78.4 | 26.4 | 9.2 | 9.8 | 3.5 | 9.2 | 4.4 | 5.6 | -- | 8.8 | 2.7 | 2.4 | -- | -- |
| All stands | 14,759.4 | 532.6 | 514.6 | 644.2 | 564.8 | 946.4 | 1,185.5 | 901.3 | 1,352.1 | 1,519.3 | 1,085.3 | 2,297.0 | 2,132.9 | 804.6 | 278.3 |

### Table 15.--Area of commercial forest land by stocking class of growing-stock trees and stand-size class, Wisconsin, 1983

(In thousand acres)

| Stocking class (percent) | All stands | Stand-size class | | | |
|---|---|---|---|---|---|
| | | Sawtimber stands | Poletimber stands | Sapling and seedling stands | Nonstocked areas |
| Less than 16.7 | 160.4 | -- | -- | -- | 160.4 |
| 16.7 to 60.9 | 2,633.4 | 1,027.2 | 806.1 | 800.1 | -- |
| 61.0 to 100.9 | 6,087.2 | 1,971.3 | 2,837.9 | 1,278.0 | -- |
| 101.0 to 133.9 | 4,829.8 | 1,401.9 | 2,243.6 | 1,184.3 | -- |
| 134.0+ | 1,048.6 | 254.3 | 335.8 | 458.5 | -- |
| All classes | 14,759.4 | 4,654.7 | 6,223.4 | 3,720.9 | 160.4 |

### Table 16.--Area of commercial forest land by stocking class based on selected stand components, Wisconsin, 1983

(In thousand acres)

| Stocking class (percent) | Stocking classified in terms of | | |
|---|---|---|---|
| | All live trees | Growing-stock trees | Rough and rotten trees |
| 0-10 | 30.6 | 54.0 | 7,344.6 |
| 11-20 | 55.7 | 155.8 | 3,762.8 |
| 21-30 | 138.9 | 357.2 | 1,873.4 |
| 31-40 | 237.0 | 487.8 | 960.1 |
| 41-50 | 364.5 | 666.2 | 459.9 |
| 51-60 | 433.2 | 960.0 | 208.8 |
| 61-70 | 652.8 | 1,278.3 | 103.2 |
| 71-80 | 945.2 | 1,384.8 | 17.6 |
| 81-90 | 1,309.4 | 1,638.1 | 20.9 |
| 91-100 | 1,824.2 | 1,758.5 | 2.1 |
| 101-110 | 1,951.2 | 1,698.5 | 4.1 |
| 111-120 | 2,130.5 | 1,607.3 | 1.9 |
| 121-130 | 1,954.9 | 1,328.1 | -- |
| 131-140 | 1,454.7 | 759.0 | -- |
| 141-150 | 885.0 | 413.2 | -- |
| 151-160 | 304.4 | 159.1 | -- |
| 161+ | 87.2 | 53.5 | -- |
| All classes | 14,759.4 | 14,759.4 | 14,759.4 |

### Table 17.--Area of noncommercial forest land by ownership class, Wisconsin, 1983

(In thousand acres)

| Ownership class | All areas | Unproductive areas | Productive-reserved areas |
|---|---|---|---|
| National Forest | 147.4 | 94.9 | 52.5[1] |
| Miscellaneous federal | 54.9 | 2.3 | 52.6 |
| State | 137.8 | 31.9 | 105.9 |
| County and municipal | 60.4 | 44.9 | 15.5 |
| Indian | 3.8 | 2.2 | 1.6 |
| Forest industry | 17.5 | 17.5 | -- |
| Farmer | 59.8 | 52.5 | 7.3 |
| Misc. private-corp. | 14.2 | 5.4 | 8.8 |
| Misc. private-indiv. | 96.1 | 79.4 | 16.7 |
| Total | 591.9 | 331.0 | 260.9 |

[1] Includes 33.8 thousand acres of productive-deferred areas.

## Table 18.--Area of noncommercial forest land by forest type, Wisconsin, 1983

(In thousand acres)

| Forest type | All areas | Unproductive areas | Productive-reserved areas[1] |
|---|---|---|---|
| Jack pine | 4.6 | 2.0 | 2.6 |
| Red pine | 17.1 | -- | 17.1 |
| White pine | 2.7 | -- | 2.7 |
| Balsam fir | 14.9 | 14.0 | .9 |
| White spruce | 1.8 | -- | 1.8 |
| Black spruce | 190.5 | 183.6 | 6.9 |
| Northern white-cedar | 20.7 | 17.2 | 3.5 |
| Tamarack | 20.5 | 20.5 | -- |
| Oak-hickory | 56.6 | 26.5 | 30.1 |
| Elm-ash-soft maple | 98.6 | 45.1 | 53.5 |
| Maple-birch | 60.9 | 2.5 | 58.4 |
| Aspen | 77.7 | 5.7 | 72.0 |
| Paper birch | 4.2 | 2.3 | 1.9 |
| Exotic | 9.5 | -- | 9.5 |
| Nonstocked | 11.6 | 11.6 | -- |
| All types | 591.9 | 331.0 | 260.9 |

[1] Includes 33.8 thousand acres of productive-deferred areas.

## Table 19.--Area of nonforest land with trees by forest type and land use, Wisconsin 1983

(In thousand acres)

| Forest type | All uses | Land use | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Cropland | Improved pasture | Wooded strips | Idle farmland | Marsh | Wind-breaks | Urban and other[1] | Wooded pasture |
| Jack pine | 14.2 | -- | 4.7 | -- | 4.4 | 5.1 | -- | -- | -- |
| Red pine | 8.5 | -- | 1.3 | 2.3 | -- | -- | 4.9 | -- | -- |
| White pine | 10.3 | -- | 2.3 | 2.2 | -- | 5.8 | -- | -- | -- |
| Balsam fir | 7.3 | -- | -- | -- | -- | 7.3 | -- | -- | -- |
| White spruce | 2.0 | -- | -- | -- | 2.0 | -- | -- | -- | -- |
| Black spruce | 9.5 | -- | -- | 1.8 | -- | 7.7 | -- | -- | -- |
| Northern white-cedar | 1.2 | -- | 1.2 | -- | -- | -- | -- | -- | -- |
| Tamarack | 30.6 | -- | -- | -- | 4.2 | 26.4 | -- | -- | -- |
| Oak-hickory | 213.9 | 16.4 | 103.2 | 12.4 | 21.0 | 8.4 | 15.7 | -- | 36.8 |
| Elm-ash-soft maple | 269.1 | 9.2 | 67.7 | 9.4 | 21.7 | 140.8 | 4.2 | -- | 16.1 |
| Maple-birch | 200.9 | 16.5 | 80.7 | 8.8 | 21.7 | 11.5 | 11.6 | -- | 50.1 |
| Aspen | 165.2 | 6.9 | 39.2 | 8.1 | 33.4 | 68.0 | 4.4 | -- | 5.2 |
| Paper birch | 28.6 | -- | -- | -- | -- | 24.7 | -- | -- | 3.9 |
| Exotic | 2.4 | -- | -- | -- | -- | 2.4 | -- | -- | -- |
| Nonstocked | 33.7 | 5.1 | 22.0 | -- | 2.1 | 4.5 | -- | -- | -- |
| Not typed | 244.3 | -- | -- | -- | -- | -- | -- | 244.3 | -- |
| All types | 1,241.7 | 54.1 | 322.3 | 45.0 | 110.5 | 312.6 | 40.8 | 244.3 | 112.1 |

[1] Forest type was not recorded on plots classified as urban and other with trees.

Table 20.--Number of live trees on commercial forest land by species group and diameter class, Wisconsin, 1983

(In thousand trees)

| Species group | All classes | Diameter class (inches at breast height) |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 1.0-2.9 | 3.0-4.9 | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-28.9 | 29.0-38.9 | 39.0+ |
| Softwoods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jack pine | 311,595 | 123,859 | 69,778 | 62,827 | 34,711 | 13,911 | 5,063 | 1,153 | 273 | 17 | 3 | -- | -- | -- | -- |
| Red pine | 214,190 | 52,318 | 45,520 | 60,871 | 33,658 | 12,293 | 4,952 | 1,787 | 1,263 | 886 | 389 | 183 | 70 | -- | -- |
| White pine | 138,015 | 64,086 | 28,459 | 16,136 | 10,403 | 6,050 | 4,062 | 2,879 | 2,052 | 1,563 | 927 | 594 | 666 | 136 | 2 |
| White spruce | 76,618 | 31,166 | 15,424 | 13,324 | 8,968 | 4,241 | 1,961 | 900 | 402 | 149 | 38 | 29 | 16 | -- | -- |
| Black spruce | 266,698 | 158,252 | 73,318 | 26,515 | 6,802 | 1,463 | 281 | 35 | 29 | 3 | -- | -- | -- | -- | -- |
| Balsam fir | 655,401 | 385,634 | 143,269 | 75,383 | 32,381 | 13,544 | 3,817 | 874 | 449 | 46 | 4 | -- | -- | -- | -- |
| Hemlock | 51,612 | 15,382 | 8,301 | 7,851 | 5,963 | 4,871 | 3,421 | 2,326 | 1,326 | 1,083 | 530 | 245 | 293 | 20 | -- |
| Tamarack | 144,825 | 81,897 | 34,600 | 17,014 | 8,331 | 1,935 | 782 | 188 | 40 | 31 | 7 | -- | -- | -- | -- |
| Eastern redcedar | 13,203 | 9,703 | 1,356 | 1,657 | 311 | 120 | 30 | 11 | 15 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 275,112 | 94,236 | 72,340 | 53,664 | 30,898 | 13,932 | 6,612 | 2,217 | 821 | 244 | 103 | 31 | 14 | -- | -- |
| Other softwoods | 5,471 | 2,892 | 1,362 | 767 | 228 | 88 | 110 | -- | 24 | -- | -- | -- | -- | -- | -- |
| Total | 2,152,740 | 1,019,425 | 493,727 | 336,009 | 172,654 | 72,448 | 31,091 | 12,370 | 6,694 | 4,022 | 2,001 | 1,082 | 1,059 | 156 | 2 |
| Hardwoods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Select white oaks | 249,444 | 121,579 | 39,698 | 27,015 | 19,640 | 13,617 | 10,530 | 6,851 | 4,517 | 2,535 | 1,436 | 911 | 868 | 227 | 20 |
| Select red oaks | 288,090 | 112,762 | 38,180 | 40,084 | 31,919 | 23,898 | 16,258 | 9,737 | 6,291 | 3,637 | 2,183 | 1,373 | 1,474 | 290 | 4 |
| Other red oaks | 304,275 | 158,646 | 38,141 | 35,873 | 26,335 | 17,800 | 11,483 | 6,936 | 4,375 | 2,166 | 1,099 | 625 | 705 | 87 | 4 |
| Select hickory | 61,982 | 37,168 | 8,242 | 5,721 | 4,460 | 3,051 | 1,864 | 842 | 423 | 145 | 47 | 10 | 9 | -- | -- |
| Other hickory | 71,599 | 40,512 | 15,329 | 10,016 | 3,619 | 992 | 832 | 199 | 71 | 20 | 6 | -- | 3 | -- | -- |
| Basswood | 223,642 | 83,818 | 38,690 | 34,243 | 28,092 | 19,319 | 9,718 | 4,890 | 2,247 | 1,260 | 602 | 351 | 330 | 73 | 9 |
| Beech | 12,182 | 7,921 | 2,123 | 315 | 456 | 272 | 372 | 252 | 149 | 161 | 75 | 47 | 35 | 4 | -- |
| Yellow birch | 114,505 | 47,286 | 29,906 | 15,500 | 8,721 | 5,849 | 3,118 | 1,820 | 982 | 687 | 291 | 156 | 159 | 30 | -- |
| Hard maple | 927,657 | 486,342 | 209,468 | 113,997 | 58,603 | 27,024 | 13,424 | 7,696 | 4,693 | 2,846 | 1,595 | 861 | 944 | 159 | 5 |
| Soft maple | 1,171,319 | 661,160 | 277,909 | 128,717 | 57,500 | 24,799 | 10,375 | 5,224 | 2,608 | 1403 | 676 | 454 | 362 | 115 | 17 |
| Elm | 307,865 | 192,570 | 48,740 | 26,793 | 15,382 | 10,404 | 6,390 | 3,461 | 2,154 | 956 | 445 | 226 | 269 | 69 | 6 |
| Black ash | 329,952 | 180,411 | 73,398 | 41,430 | 19,747 | 9,158 | 3,703 | 1,214 | 604 | 184 | 61 | 27 | 15 | -- | -- |
| White & green ash | 167,004 | 109,033 | 19,520 | 13,883 | 9,568 | 7,205 | 4,000 | 2,007 | 1,049 | 422 | 141 | 45 | 116 | 15 | -- |
| Cottonwood | 3,039 | 978 | 186 | 609 | 299 | 123 | 277 | 293 | 35 | 75 | 62 | 17 | 35 | 41 | 9 |
| Willow | 10,776 | 6,448 | 1,994 | 686 | 509 | 286 | 261 | 178 | 135 | 130 | 45 | 36 | 52 | 16 | -- |
| Hackberry | 5,228 | 4,829 | -- | 187 | 123 | -- | 53 | 31 | -- | -- | -- | -- | 5 | -- | -- |
| Balsam poplar | 21,886 | 13,890 | 2,698 | 2,493 | 1,144 | 671 | 368 | 392 | 146 | 28 | 28 | 21 | 6 | 1 | -- |
| Bigtooth aspen | 277,949 | 166,213 | 30,507 | 26,194 | 22,605 | 16,794 | 10,017 | 3,585 | 1,405 | 482 | 88 | 45 | 12 | 2 | -- |
| Quaking aspen | 1,581,110 | 1,093,156 | 185,723 | 121,007 | 90,938 | 53,938 | 23,540 | 8,966 | 2,835 | 746 | 188 | 64 | 9 | -- | -- |
| Paper birch | 524,579 | 200,210 | 133,886 | 92,600 | 62,232 | 24,460 | 7,958 | 2,392 | 654 | 121 | 55 | 5 | 5 | 1 | -- |
| River birch | 3,935 | 1,571 | 1,028 | 489 | 376 | 221 | 130 | 48 | 39 | -- | 25 | 5 | 3 | -- | -- |
| Black cherry | 261,944 | 195,158 | 32,626 | 16,669 | 8,656 | 5,285 | 1,747 | 1,250 | 314 | 142 | 54 | 22 | 19 | 2 | -- |
| Black walnut | 3,940 | 1,511 | -- | 725 | 463 | 383 | 386 | 253 | 75 | 98 | 25 | 16 | 5 | -- | -- |
| Butternut | 12,942 | 5,947 | 1,034 | 1,292 | 2,162 | 847 | 742 | 443 | 315 | 90 | 41 | 14 | 13 | 2 | -- |
| Other hardwoods | 51,932 | 31,357 | 10,613 | 5,089 | 2,360 | 981 | 753 | 453 | 179 | 90 | 28 | 4 | 23 | 2 | -- |
| Noncommercial sps. | 614,303 | 490,493 | 95,481 | 21,956 | 4,910 | 1,003 | 406 | 47 | 7 | -- | -- | -- | -- | -- | -- |
| Total | 7,603,079 | 4,450,969 | 1,335,120 | 783,583 | 480,819 | 268,380 | 138,705 | 69,460 | 36,302 | 18,424 | 9,296 | 5,335 | 5,476 | 1,136 | 74 |
| All species | 9,755,819 | 5,470,394 | 1,828,847 | 1,119,592 | 653,473 | 340,828 | 169,796 | 81,830 | 42,996 | 22,446 | 11,297 | 6,417 | 6,535 | 1,292 | 76 |

## Table 21.--Number of growing-stock trees on commercial forest land by species group and diameter class, Wisconsin, 1983

(In thousand trees)

| Species group | All classes | Diameter class (inches at breast height) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1.0-2.9 | 3.0-4.9 | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-28.9 | 29.0-38.9 | 39.0+ |
| Softwoods | | | | | | | | | | | | | | | |
| Jack pine | 298,425 | 121,756 | 67,822 | 57,422 | 32,913 | 12,910 | 4,562 | 858 | 171 | 8 | 3 | -- | -- | -- | -- |
| Red pine | 212,039 | 52,318 | 45,123 | 59,899 | 33,080 | 12,138 | 4,943 | 1,775 | 1,251 | 876 | 389 | 177 | 70 | -- | -- |
| White pine | 133,431 | 63,659 | 28,292 | 14,745 | 9,471 | 5,252 | 3,714 | 2,706 | 1,937 | 1,478 | 888 | 544 | 624 | 119 | 2 |
| White spruce | 75,451 | 31,166 | 15,074 | 13,283 | 8,420 | 4,108 | 1,901 | 883 | 388 | 145 | 38 | 29 | 16 | -- | -- |
| Black spruce | 262,568 | 156,790 | 71,760 | 25,670 | 6,592 | 1,417 | 272 | 35 | 29 | 3 | -- | -- | -- | -- | -- |
| Balsam fir | 648,848 | 384,586 | 140,586 | 74,328 | 31,268 | 13,102 | 3,665 | 841 | 435 | 33 | 4 | -- | -- | -- | -- |
| Hemlock | 47,400 | 15,382 | 7,896 | 6,767 | 4,926 | 4,256 | 2,860 | 2,058 | 1,252 | 993 | 469 | 243 | 280 | 18 | -- |
| Tamarack | 142,325 | 81,492 | 33,846 | 16,317 | 7,857 | 1,833 | 756 | 146 | 40 | 31 | 7 | -- | -- | -- | -- |
| Eastern redcedar | 10,643 | 8,321 | 774 | 1,350 | 129 | 43 | -- | 11 | 15 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 252,152 | 91,799 | 67,616 | 47,451 | 26,783 | 10,999 | 4,919 | 1,743 | 588 | 179 | 48 | 19 | 8 | -- | -- |
| Other softwoods | 4,915 | 2,892 | 1,136 | 619 | 171 | 18 | 68 | -- | 11 | -- | -- | -- | -- | -- | -- |
| Total | 2,088,197 | 1,010,161 | 479,925 | 317,851 | 161,610 | 66,076 | 27,660 | 11,056 | 6,117 | 3,746 | 1,846 | 1,012 | 998 | 137 | 2 |
| Hardwoods | | | | | | | | | | | | | | | |
| Select white oaks | 214,242 | 117,230 | 31,207 | 20,721 | 14,913 | 10,265 | 7,853 | 4,966 | 3,139 | 1,774 | 966 | 597 | 489 | 108 | 14 |
| Select red oaks | 266,432 | 111,372 | 35,752 | 34,341 | 28,605 | 21,281 | 14,213 | 8,297 | 5,304 | 3,206 | 1,767 | 1,039 | 1,082 | 169 | 4 |
| Other red oaks | 257,326 | 155,759 | 30,485 | 23,601 | 18,344 | 11,928 | 7,487 | 4,234 | 2,800 | 1,264 | 678 | 356 | 349 | 41 | -- |
| Select hickory | 57,659 | 36,922 | 7,428 | 4,285 | 3,927 | 2,363 | 1,562 | 682 | 303 | 121 | 47 | 10 | 9 | -- | -- |
| Other hickory | 69,516 | 40,512 | 14,206 | 9,736 | 3,194 | 944 | 660 | 178 | 57 | 20 | 6 | -- | 3 | -- | -- |
| Basswood | 208,609 | 81,847 | 35,999 | 29,366 | 26,339 | 17,916 | 8,949 | 4,355 | 1,893 | 964 | 450 | 259 | 227 | 42 | 3 |
| Beech | 10,819 | 7,549 | 1,573 | 315 | 399 | 219 | 265 | 181 | 99 | 116 | 45 | 33 | 25 | -- | -- |
| Yellow birch | 97,173 | 45,191 | 25,526 | 11,206 | 6,463 | 3,966 | 2,043 | 1,219 | 709 | 489 | 185 | 89 | 76 | 11 | -- |
| Hard maple | 863,036 | 471,040 | 195,509 | 98,506 | 50,990 | 21,994 | 10,661 | 5,877 | 3,688 | 2,195 | 1,198 | 655 | 632 | 90 | 1 |
| Soft maple | 1093,477 | 641,815 | 255,553 | 111,352 | 49,380 | 19,961 | 7,779 | 3,933 | 1,766 | 943 | 447 | 255 | 234 | 54 | 5 |
| Elm | 288,127 | 188,573 | 45,014 | 21,516 | 12,992 | 8,599 | 5,366 | 2,789 | 1,687 | 810 | 349 | 178 | 206 | 43 | 5 |
| Black ash | 311,352 | 176,816 | 64,762 | 38,318 | 17,954 | 8,312 | 3,335 | 1,089 | 523 | 161 | 44 | 27 | 11 | -- | -- |
| White & green ash | 160,912 | 107,813 | 18,426 | 12,640 | 8,667 | 6,501 | 3,656 | 1,719 | 888 | 349 | 131 | 38 | 73 | 11 | -- |
| Cottonwood | 2,581 | 978 | 186 | 329 | 189 | 123 | 240 | 283 | 35 | 75 | 58 | 17 | 21 | 39 | 8 |
| Willow | 8,554 | 6,187 | 780 | 359 | 356 | 240 | 232 | 109 | 102 | 116 | 33 | 15 | 23 | 2 | -- |
| Hackberry | 5,169 | 4,829 | -- | 187 | 64 | -- | 53 | 31 | -- | -- | -- | -- | 5 | -- | -- |
| Balsam poplar | 21,697 | 13,890 | 2,698 | 2,445 | 1,116 | 633 | 325 | 385 | 135 | 18 | 28 | 21 | 2 | 1 | -- |
| Bigtooth aspen | 269,819 | 165,095 | 29,407 | 24,282 | 20,958 | 15,992 | 9,255 | 3,185 | 1195 | 363 | 59 | 20 | 6 | 2 | -- |
| Quaking aspen | 1,529,163 | 1,083,897 | 175,664 | 108,344 | 83,649 | 47,601 | 20,139 | 7,136 | 2,137 | 480 | 93 | 20 | 3 | -- | -- |
| Paper birch | 494,573 | 195,273 | 126,938 | 83,788 | 57,220 | 21,887 | 6,894 | 1,982 | 484 | 84 | 18 | 3 | 2 | -- | -- |
| River birch | 3,682 | 1,571 | 1,028 | 489 | 279 | 158 | 78 | 31 | 27 | -- | 13 | 5 | 3 | -- | -- |
| Black cherry | 236,003 | 189,502 | 24,216 | 10,449 | 5,599 | 3,875 | 1239 | 767 | 182 | 117 | 41 | 5 | 11 | -- | -- |
| Black walnut | 3,420 | 1,511 | -- | 539 | 372 | 299 | 305 | 241 | 39 | 83 | 17 | 11 | 3 | -- | -- |
| Butternut | 9,847 | 5,339 | 1034 | 675 | 1260 | 540 | 454 | 269 | 177 | 61 | 24 | 4 | 8 | 2 | -- |
| Other hardwoods | 41,576 | 27,488 | 8,891 | 2,855 | 1,302 | 591 | 250 | 151 | 9 | 17 | 22 | -- | -- | -- | -- |
| Noncommercial specie | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 6,524,764 | 3,877,999 | 1,132,282 | 650,644 | 414,531 | 226,188 | 113,293 | 54,089 | 27,378 | 13,826 | 6,719 | 3,657 | 3,503 | 615 | 40 |
| All species | 8,612,961 | 4,888,160 | 1,612,207 | 968,495 | 576,141 | 292,264 | 140,953 | 65,145 | 33,495 | 17,572 | 8,565 | 4,669 | 4,501 | 752 | 42 |

Table 22.--Net volume of growing stock on commercial forest land by species group, Wisconsin, 1968 and 1983

(In thousand cubic feet)

| Species group | 1968[1] | 1983 |
|---|---|---|
| Softwoods | | |
| Jack pine | 432,849 | 536,333 |
| Red pine | 245,342 | 763,226 |
| White pine | 424,471 | 565,605 |
| White spruce | 81,855 | 199,628 |
| Black spruce | 92,206 | 123,955 |
| Balsam fir | 440,205 | 553,038 |
| Hemlock | 339,558 | 283,898 |
| Tamarack | 113,325 | 133,877 |
| Eastern redcedar | 356 | 3,973 |
| Northern white-cedar | 348,283 | 471,544 |
| Other softwoods | 650 | 3,231 |
| Total | 2,519,100 | 3,638,308 |
| Hardwoods | | |
| White oak | 407,850 | 632,216 |
| Select red oak | 1,000,373 | 1,419,689 |
| Other red oak | 372,078 | 625,311 |
| Select hickory | 73,609 | 113,434 |
| Other hickory | 33,099 | 80,472 |
| Basswood | 561,023 | 835,765 |
| Beech | 25,326 | 28,707 |
| Yellow birch | 220,444 | 207,564 |
| Hard maple | 1,004,585 | 1,494,611 |
| Soft maple | 679,959 | 1,219,528 |
| Elm | 695,795 | 434,129 |
| Black ash | 305,109 | 426,864 |
| White & green ash | 200,676 | 310,499 |
| Cottonwood | 19,298 | 32,668 |
| Willow | 14,778 | 24,200 |
| Hackberry | 988 | 2,478 |
| Balsam poplar | 32,441 | 39,414 |
| Bigtooth aspen | 522,579 | 686,786 |
| Quaking aspen | 1,648,199 | 1,938,487 |
| Paper birch | 720,835 | 1,046,686 |
| River birch | 8,500 | 8,646 |
| Black cherry | 69,270 | 164,017 |
| Black walnut | 7,407 | 22,609 |
| Butternut | 18,361 | 38,952 |
| Other hardwoods | 6,318 | 26,145 |
| Total | 8,648,900 | 11,859,877 |
| All species | 11,168,000 | 15,498,185 |

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[1] Figures have been adjusted from those published after the 1968 survey to conform to 1983 volumes because of changes in survey definitions and procedures.

Table 23.--Net volume of all live trees on commercial forest land by species group and diameter class, Wisconsin, 1983

(In thousand cubic feet)

| Species group | All classes | Diameter class (inches at breast height) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-28.9 | 29.0-38.9 | 39.0+ |
| Softwoods | | | | | | | | | | | | | |
| Jack pine | 576,685 | 168,968 | 180,172 | 125,577 | 70,419 | 23,569 | 7,275 | 531 | 174 | -- | -- | -- | -- |
| Red pine | 771,606 | 221,938 | 198,829 | 119,906 | 75,193 | 40,493 | 39,240 | 37,135 | 21,196 | 11,546 | 6,130 | -- | -- |
| White pine | 600,400 | 24,220 | 44,791 | 51,014 | 61,806 | 69,276 | 69,955 | 73,034 | 57,477 | 47,062 | 74,343 | 26,926 | 496 |
| White spruce | 205,234 | 28,169 | 49,084 | 44,372 | 33,477 | 23,063 | 13,965 | 6,924 | 2,340 | 2,292 | 1,548 | -- | -- |
| Black spruce | 127,049 | 65,421 | 38,361 | 16,074 | 5,065 | 881 | 1,095 | 152 | -- | -- | -- | -- | -- |
| Balsam fir | 566,663 | 153,514 | 172,561 | 137,521 | 63,439 | 21,809 | 15,540 | 2,077 | 202 | -- | -- | -- | -- |
| Hemlock | 303,195 | 10,726 | 22,020 | 35,576 | 41,775 | 44,608 | 37,686 | 41,133 | 25,631 | 16,072 | 24,803 | 3,165 | -- |
| Tamarack | 139,170 | 52,311 | 48,681 | 18,912 | 12,489 | 3,975 | 1,151 | 1,323 | 328 | -- | -- | -- | -- |
| Eastern redcedar | 5,865 | 3,155 | 1,124 | 840 | 292 | 160 | 294 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 537,041 | 128,938 | 145,908 | 110,682 | 77,904 | 39,901 | 19,753 | 7,933 | 3,563 | 1,512 | 947 | -- | -- |
| Other softwoods | 4,919 | 1,394 | 862 | 640 | 1,403 | -- | 620 | -- | -- | -- | -- | -- | -- |
| Total | 3,837,827 | 858,754 | 902,393 | 661,114 | 443,262 | 267,735 | 206,574 | 170,242 | 110,911 | 78,484 | 107,771 | 30,091 | 496 |
| Hardwoods | | | | | | | | | | | | | |
| White oak | 853,021 | 57,257 | 86,724 | 106,178 | 128,006 | 119,187 | 104,754 | 76,538 | 54,061 | 42,466 | 53,121 | 20,991 | 3,738 |
| Select red oak | 1,617,120 | 126,434 | 185,630 | 231,297 | 240,870 | 205,061 | 179,139 | 134,323 | 99,742 | 75,242 | 105,203 | 33,234 | 945 |
| Other red oak | 927,994 | 77,244 | 123,269 | 146,751 | 148,030 | 127,309 | 109,104 | 68,775 | 44,503 | 29,551 | 44,747 | 8,260 | 451 |
| Select hickory | 135,646 | 20,244 | 26,258 | 27,775 | 25,728 | 16,356 | 10,980 | 5,062 | 2,063 | 609 | 571 | -- | -- |
| Other hickory | 86,738 | 35,859 | 21,582 | 9,558 | 12,451 | 4,191 | 1,888 | 705 | 253 | -- | 251 | -- | -- |
| Basswood | 916,982 | 90,474 | 163,125 | 198,506 | 155,492 | 111,014 | 68,215 | 47,024 | 28,446 | 20,234 | 24,025 | 8,196 | 2,231 |
| Beech | 36,766 | 1,057 | 2,797 | 2,929 | 5,792 | 4,998 | 4,235 | 5,959 | 3,256 | 2,611 | 2,716 | 416 | -- |
| Yellow birch | 272,271 | 25,207 | 39,242 | 49,710 | 41,365 | 34,291 | 26,272 | 24,039 | 11,689 | 7,856 | 9,782 | 2,818 | -- |
| Hard maple | 1,750,232 | 328,519 | 334,088 | 261,129 | 203,305 | 165,237 | 137,660 | 107,052 | 74,648 | 50,954 | 69,306 | 17,788 | 546 |
| Soft maple | 1,451,822 | 403,536 | 333,478 | 238,987 | 151,494 | 107,035 | 70,059 | 49,808 | 29,819 | 23,463 | 25,973 | 14,313 | 3,857 |
| Elm | 519,445 | 40,069 | 66,516 | 87,422 | 89,910 | 71,712 | 61,229 | 36,297 | 21,012 | 13,162 | 21,188 | 9,802 | 1,126 |
| Black ash | 457,794 | 154,808 | 117,701 | 85,529 | 51,181 | 22,928 | 15,364 | 5,811 | 2,289 | 1,486 | 697 | -- | -- |
| White & green ash | 342,931 | 42,693 | 57,087 | 71,940 | 62,163 | 43,698 | 30,375 | 15,305 | 6,989 | 2,537 | 8,510 | 1,634 | -- |
| Cottonwood | 35,476 | 608 | 1,278 | 1,255 | 4,334 | 6,856 | 1,082 | 3,267 | 3,381 | 1,084 | 2,999 | 6,455 | 2,877 |
| Willow | 34,446 | 940 | 2,003 | 2,519 | 4,203 | 3,709 | 4,237 | 5,486 | 2,324 | 2,004 | 4,630 | 2,391 | -- |
| Hackberry | 2,687 | 269 | 465 | -- | 796 | 769 | -- | -- | -- | -- | 388 | -- | -- |
| Balsam poplar | 41,033 | 4,570 | 6,026 | 6,585 | 5,476 | 9,494 | 4,319 | 1,017 | 1,546 | 1,504 | 330 | 166 | -- |
| Bigtooth aspen | 725,731 | 75,927 | 140,694 | 182,628 | 168,617 | 85,852 | 44,979 | 19,243 | 4,266 | 2,459 | 835 | 231 | -- |
| Quaking aspen | 2,101,770 | 420,341 | 551,596 | 517,238 | 334,142 | 173,837 | 72,420 | 23,133 | 6,506 | 2,055 | 502 | -- | -- |
| Paper birch | 1,143,339 | 344,603 | 380,347 | 236,107 | 112,200 | 46,863 | 16,711 | 3,981 | 1,947 | 269 | 206 | 105 | -- |
| River birch | 11,392 | 1,191 | 2,132 | 2,216 | 2,153 | 786 | 1,257 | -- | 1,091 | 343 | 223 | -- | -- |
| Black cherry | 233,533 | 61,900 | 52,796 | 51,400 | 25,476 | 24,458 | 8,169 | 4,770 | 2,251 | 954 | 1,283 | 76 | -- |
| Black walnut | 27,406 | 2,519 | 2,843 | 4,167 | 5,296 | 5,233 | 1,863 | 3,416 | 1,016 | 732 | 321 | -- | -- |
| Butternut | 57,918 | 4,080 | 12,811 | 8,287 | 10,390 | 8,274 | 8,006 | 2,974 | 1,453 | 568 | 826 | 249 | -- |
| Other hardwoods | 53,256 | 13,278 | 10,888 | 7,267 | 7,514 | 6,653 | 3,424 | 2,077 | 806 | 138 | 1,054 | 157 | -- |
| Noncommercial sp. | 72,694 | 40,891 | 19,546 | 7,046 | 4,368 | 710 | 133 | -- | -- | -- | -- | -- | -- |
| Total | 13,909,443 | 2,374,518 | 2,740,922 | 2,544,426 | 2,000,752 | 1,406,511 | 985,874 | 646,062 | 405,357 | 282,281 | 379,687 | 127,282 | 15,771 |
| All species | 17,747,270 | 3,233,272 | 3,643,315 | 3,205,540 | 2,444,014 | 1,674,246 | 1,192,448 | 816,304 | 516,268 | 360,765 | 487,458 | 157,373 | 16,267 |

Table 24.--Net volume of timber on commercial forest land by class of timber and softwoods and hardwoods, Wisconsin, 1983

(In thousand cubic feet)

| Class of timber | All species | Softwoods | Hardwoods |
|---|---|---|---|
| Live trees | | | |
| Growing-stock trees | | | |
| Poletimber | 8,444,948 | 1,686,332 | 6,758,616 |
| Sawtimber | | | |
| Saw log portion | 4,791,822 | 1,491,395 | 3,300,427 |
| Upper stem portion | 2,261,415 | 460,581 | 1,800,834 |
| Subtotal | 7,053,237 | 1,951,976 | 5,101,261 |
| Total growing stock | 15,498,185 | 3,638,308 | 11,859,877 |
| Cull trees | | | |
| Rough and rotten cull trees | | | |
| Poletimber | 979,018 | 75,356 | 903,662 |
| Sawtimber | 848,895 | 89,361 | 759,534 |
| Subtotal | 1,827,913 | 164,717 | 1,663,196 |
| Short-log trees | 421,172 | 34,802 | 386,370 |
| Total cull | 2,249,085 | 199,519 | 2,049,566 |
| All live trees | 17,747,270 | 3,837,827 | 13,909,443 |
| Salvable dead trees | | | |
| Growing-stock trees | 444,319 | 78,795 | 365,524 |
| Cull trees | 11,511 | 1,776 | 9,735 |
| All salvable dead trees | 455,830 | 80,571 | 375,259 |
| All classes | 18,203,100 | 3,918,398 | 14,284,702 |

Table 25.--Net volume of growing stock, sawtimber, short-log, and rough and rotten trees on commercial forest land by individual species, Wisconsin, 1983

| Species | Total all live | All live trees: Growing stock | All live trees: Short-log cull | All live trees: Rough and rotten cull | Total saw log | Saw-log size trees: Sawtimber | Saw-log size trees: Short-log |
|---|---|---|---|---|---|---|---|
| | - - - - - - - - | -Thousand cubic feet- | - - - - - - - - - | | - - - - - | -Thousand board feet[1] | - - - - |
| Softwoods | | | | | | | |
| Jack pine | 576,685 | 536,333 | 6,579 | 33,773 | 1,092,224 | 1,069,425 | 22,799 |
| Red pine | 771,606 | 763,226 | 380 | 8,000 | 1,998,648 | 1,997,086 | 1,562 |
| White pine | 600,400 | 565,605 | 11,024 | 23,771 | 2,703,704 | 2,666,253 | 37,451 |
| White spruce | 205,234 | 199,628 | 559 | 5,047 | 609,338 | 606,863 | 2,475 |
| Black spruce | 127,049 | 123,955 | 192 | 2,902 | 102,290 | 101,796 | 494 |
| Balsam fir | 566,663 | 553,038 | 1,381 | 12,244 | 1,035,117 | 1,031,536 | 3,581 |
| Hemlock | 303,195 | 283,898 | 6,026 | 13,271 | 1,145,397 | 1,130,685 | 14,712 |
| Tamarack | 139,170 | 133,877 | 620 | 4,673 | 196,553 | 193,864 | 2,689 |
| Eastern redcedar | 5,865 | 3,973 | -- | 1,892 | 4,843 | 4,843 | -- |
| Northern white-cedar | 537,041 | 471,544 | 7,677 | 57,820 | 1,145,197 | 1,118,865 | 26,332 |
| Scotch pine | 4,508 | 2,820 | 364 | 1,324 | 9,450 | 7,630 | 1,820 |
| Norway spruce | 411 | 411 | -- | -- | -- | -- | -- |
| Total | 3,837,827 | 3,638,308 | 34,802 | 164,717 | 10,042,761 | 9,928,846 | 113,915 |
| Hardwoods | | | | | | | |
| White oak | 618,672 | 465,580 | 48,028 | 105,064 | 1,774,463 | 1,648,564 | 125,899 |
| Swamp white oak | 26,933 | 22,575 | 1,671 | 2,687 | 89,731 | 85,459 | 4,272 |
| Bur oak | 207,416 | 144,061 | 15,607 | 47,748 | 538,012 | 496,755 | 41,257 |
| Northern red oak | 1,617,120 | 1,419,689 | 58,301 | 139,130 | 4,686,524 | 4,555,263 | 131,261 |
| Northern pin oak | 406,506 | 258,522 | 25,536 | 122,448 | 740,780 | 682,670 | 58,110 |
| Black oak | 521,488 | 366,789 | 41,946 | 112,753 | 1,231,153 | 1,135,300 | 95,853 |
| Shagbark hickory | 135,646 | 113,434 | 4,065 | 18,147 | 283,167 | 272,089 | 11,078 |
| Bitternut hickory | 86,660 | 80,472 | 1,319 | 4,869 | 90,020 | 86,411 | 3,609 |
| Pignut hickory | 78 | -- | -- | 78 | -- | -- | -- |
| American basswood | 916,982 | 835,765 | 16,376 | 64,841 | 2,027,404 | 1,991,915 | 35,489 |
| Beech | 36,766 | 28,707 | 1,674 | 6,385 | 121,659 | 117,188 | 4,471 |
| Yellow birch | 272,271 | 207,564 | 11,098 | 53,609 | 587,744 | 561,730 | 26,014 |
| Black maple | 1,502 | 1,309 | 193 | -- | 7,129 | 6,619 | 510 |
| Sugar maple | 1,748,730 | 1,493,302 | 47,216 | 208,212 | 3,492,747 | 3,377,801 | 114,946 |
| Red maple | 1,336,943 | 1,130,926 | 27,768 | 178,249 | 1,632,643 | 1,557,812 | 74,831 |
| Silver maple | 114,879 | 88,602 | 7,083 | 19,194 | 319,657 | 301,424 | 18,233 |
| American elm | 433,018 | 360,173 | 21,507 | 51,338 | 1,048,267 | 993,766 | 54,501 |
| Slippery elm | 61,416 | 50,435 | 2,296 | 8,685 | 140,658 | 134,819 | 5,839 |
| Rock elm | 25,011 | 23,521 | 132 | 1,358 | 54,457 | 54,123 | 334 |
| Black ash | 457,794 | 426,864 | 1,962 | 28,968 | 555,392 | 549,728 | 5,664 |
| White ash | 238,348 | 218,410 | 4,497 | 15,441 | 556,410 | 546,016 | 10,394 |
| Green ash | 104,583 | 92,089 | 2,570 | 9,924 | 273,131 | 267,163 | 5,968 |
| Eastern cottonwood | 35,476 | 32,668 | 1,311 | 1,497 | 134,968 | 130,777 | 4,191 |
| Black willow | 34,446 | 24,200 | 2,891 | 7,355 | 93,358 | 84,501 | 8,857 |
| Hackberry | 2,687 | 2,478 | -- | 209 | 8,473 | 8,473 | -- |
| Balsam poplar | 41,033 | 39,414 | 327 | 1,292 | 100,721 | 99,922 | 799 |
| Bigtooth aspen | 725,731 | 686,786 | 7,574 | 31,371 | 1,397,682 | 1,385,402 | 12,280 |
| Quaking aspen | 2,101,770 | 1,938,487 | 11,740 | 151,543 | 2,681,364 | 2,655,293 | 26,071 |
| Paper birch | 1,143,339 | 1,046,686 | 8,418 | 88,235 | 814,443 | 791,454 | 22,989 |
| River birch | 11,392 | 8,646 | 645 | 2,101 | 21,616 | 19,495 | 2,121 |
| Black cherry | 233,533 | 164,017 | 6,276 | 63,240 | 279,098 | 262,572 | 16,526 |
| Black walnut | 27,406 | 22,609 | 798 | 3,999 | 86,858 | 84,770 | 2,088 |
| Butternut | 57,918 | 38,952 | 2,758 | 16,208 | 131,337 | 123,867 | 7,470 |
| Boxelder | 37,039 | 14,535 | 2,215 | 20,289 | 32,692 | 24,662 | 8,030 |
| Northern catalpa | 397 | -- | -- | 397 | -- | -- | -- |
| Honeylocust | 1,193 | 1,128 | -- | 65 | 2,535 | 2,535 | -- |
| Red mulberry | 1,157 | 205 | -- | 952 | -- | -- | -- |
| Black locust | 13,470 | 10,277 | 572 | 2,621 | 12,246 | 10,229 | 2,017 |
| Total | 13,836,749 | 11,859,877 | 386,370 | 1,590,502 | 26,048,539 | 25,106,567 | 941,972 |
| All species[2] | 17,674,576 | 15,498,185 | 421,172 | 1,755,219 | 36,091,300 | 35,035,413 | 1,055,887 |

[1] International 1/4-inch rule.

[2] These totals do not include volume for noncommercial species. Volumes for individual noncommercial species are found in Table 26.

## Table 26.--Net volume of noncommercial species on commercial forest land by individual species, Wisconsin, 1983

(In thousand cubic feet)

| Species | Cull volume |
|---|---|
| Ailanthus | 576 |
| American hornbeam | 583 |
| Hawthorn | 2,892 |
| Apple | 1,104 |
| Eastern hophornbeamam | 60,344 |
| Pincherry | 1,243 |
| Chokecherry | 5,377 |
| Mountain ash | 504 |
| Peachleaf willow | 71 |
| All species | 72,694 |

## Table 27.--Net volume of growing stock on commercial forest land by species group and Forest Survey Unit, Wisconsin, 1983

(In thousand cubic feet)

| Species group | All Units | Forest Survey Unit<br>Northeast | Northwest | Central | Southwest | Southeast |
|---|---|---|---|---|---|---|
| Softwoods | | | | | | |
| Jack pine | 536,333 | 98,249 | 237,849 | 190,546 | 7,060 | 2,629 |
| Red pine | 763,226 | 264,500 | 179,071 | 232,454 | 67,514 | 19,687 |
| White pine | 565,605 | 208,242 | 154,382 | 172,290 | 14,305 | 16,386 |
| White spruce | 199,628 | 72,646 | 121,342 | 905 | 310 | 4,425 |
| Black spruce | 123,955 | 76,929 | 41,303 | 3,982 | 914 | 827 |
| Balsam fir | 553,038 | 235,337 | 299,183 | 16,335 | 194 | 1,989 |
| Hemlock | 283,898 | 188,149 | 66,348 | 26,895 | -- | 2,506 |
| Tamarack | 133,877 | 38,276 | 59,582 | 25,976 | -- | 10,043 |
| Eastern redcedar | 3,973 | -- | -- | 405 | 1,479 | 2,089 |
| Northern white-cedar | 471,544 | 241,284 | 124,494 | 30,702 | -- | 75,064 |
| Other softwoods | 3,231 | -- | 325 | 2,565 | -- | 341 |
| Total | 3,638,308 | 1,423,612 | 1,283,879 | 703,055 | 91,776 | 135,986 |
| Hardwoods | | | | | | |
| White oak | 632,216 | 10,329 | 73,731 | 160,013 | 278,311 | 109,832 |
| Select red oak | 1,419,689 | 209,694 | 392,975 | 336,908 | 403,571 | 76,541 |
| Other red oak | 625,311 | 42,462 | 41,248 | 317,206 | 175,245 | 49,150 |
| Select hickory | 113,434 | -- | -- | 5,344 | 74,011 | 34,079 |
| Other hickory | 80,472 | 10,553 | 9,803 | 11,836 | 40,083 | 8,197 |
| Basswood | 835,765 | 273,476 | 334,289 | 75,883 | 124,839 | 27,278 |
| Beech | 28,707 | 14,767 | -- | 1,092 | -- | 12,848 |
| Yellow birch | 207,564 | 89,587 | 85,401 | 24,323 | 1,263 | 6,990 |
| Hard maple | 1,494,611 | 639,062 | 553,791 | 115,891 | 116,869 | 68,998 |
| Soft maple | 1,219,528 | 298,795 | 468,019 | 306,458 | 91,605 | 54,651 |
| Elm | 434,129 | 116,361 | 141,996 | 43,125 | 88,963 | 43,684 |
| Black ash | 426,864 | 81,141 | 226,230 | 63,807 | 14,133 | 41,553 |
| White & green ash | 310,499 | 71,562 | 83,849 | 38,682 | 44,283 | 72,123 |
| Cottonwood | 32,668 | 7,586 | -- | 2,368 | 18,288 | 4,426 |
| Willow | 24,200 | 2,020 | 163 | 3,034 | 6,822 | 12,161 |
| Hackberry | 2,478 | -- | -- | -- | 1,635 | 843 |
| Balsam poplar | 39,414 | 26,115 | 8,547 | -- | 1,466 | 3,286 |
| Bigtooth aspen | 686,786 | 153,953 | 272,055 | 153,865 | 87,754 | 19,159 |
| Quaking aspen | 1,938,487 | 589,553 | 872,273 | 351,029 | 79,237 | 46,395 |
| Paper birch | 1,046,686 | 366,696 | 438,362 | 127,154 | 91,251 | 23,223 |
| River birch | 8,646 | -- | -- | 2,706 | 5,940 | -- |
| Black cherry | 164,017 | 41,678 | 19,820 | 16,345 | 47,829 | 38,345 |
| Black walnut | 22,609 | -- | -- | 220 | 16,233 | 6,156 |
| Butternut | 38,952 | 4,970 | 4,841 | 4,880 | 21,628 | 2,633 |
| Other hardwoods | 26,145 | 104 | 118 | 3,641 | 12,636 | 9,646 |
| Total | 11,859,877 | 3,050,464 | 4,027,511 | 2,165,810 | 1,843,895 | 772,197 |
| All species | 15,498,185 | 4,474,076 | 5,311,390 | 2,868,865 | 1,935,671 | 908,183 |

Table 28.--Net volume of sawtimber on commercial forest land by species group and Forest Survey Unit, Wisconsin, 1983

(In thousand board feet)[1]

| Species group | All Units | Forest Survey Unit<br>Northeast | Northwest | Central | Southwest | Southeast |
|---|---|---|---|---|---|---|
| Softwoods | | | | | | |
| Jack pine | 1,069,425 | 227,227 | 403,480 | 416,129 | 19,028 | 3,561 |
| Red pine | 1,997,086 | 902,043 | 654,363 | 325,587 | 73,260 | 41,833 |
| White pine | 2,666,253 | 1,032,510 | 745,829 | 772,302 | 57,982 | 57,630 |
| White spruce | 606,863 | 223,435 | 368,931 | 3,147 | -- | 11,350 |
| Black spruce | 101,796 | 65,215 | 33,543 | 3,038 | -- | -- |
| Balsam fir | 1,031,536 | 422,051 | 588,647 | 18,838 | -- | 2,000 |
| Hemlock | 1,130,685 | 772,542 | 264,927 | 88,210 | -- | 5,006 |
| Tamarack | 193,864 | 41,560 | 94,390 | 34,873 | -- | 23,041 |
| Eastern redcedar | 4,843 | -- | -- | 1,272 | 1,837 | 1,734 |
| Northern white-cedar | 1,118,865 | 510,669 | 388,516 | 40,436 | -- | 179,244 |
| Other softwoods | 7,630 | -- | 1,392 | 6,238 | -- | -- |
| Total | 9,928,846 | 4,197,252 | 3,544,018 | 1,710,070 | 152,107 | 325,399 |
| Hardwoods | | | | | | |
| White oak | 2,230,778 | 28,737 | 202,018 | 472,657 | 1,037,655 | 489,711 |
| Select red oak | 4,555,263 | 565,970 | 846,693 | 1,106,582 | 1,698,953 | 337,065 |
| Other red oak | 1,817,970 | 105,416 | 100,877 | 772,840 | 657,420 | 181,417 |
| Select hickory | 272,089 | -- | -- | 13,982 | 161,696 | 96,411 |
| Other hickory | 86,411 | 14,715 | 9,661 | 19,733 | 29,895 | 12,407 |
| Basswood | 1,991,915 | 562,327 | 732,985 | 213,198 | 387,042 | 96,363 |
| Beech | 117,188 | 59,359 | -- | 4,749 | -- | 53,080 |
| Yellow birch | 561,730 | 272,974 | 221,270 | 54,922 | 3,262 | 9,302 |
| Hard maple | 3,384,420 | 1,469,909 | 905,072 | 341,476 | 425,061 | 242,902 |
| Soft maple | 1,859,236 | 351,355 | 498,562 | 563,439 | 265,802 | 180,078 |
| Elm | 1,182,708 | 324,027 | 411,041 | 109,512 | 228,878 | 109,250 |
| Black ash | 549,728 | 99,241 | 269,758 | 100,226 | 30,886 | 49,617 |
| White & green ash | 813,179 | 179,441 | 190,571 | 96,736 | 131,000 | 215,431 |
| Cottonwood | 130,777 | 30,690 | -- | 10,173 | 73,983 | 15,931 |
| Willow | 84,501 | 7,351 | 720 | 10,825 | 19,288 | 46,317 |
| Hackberry | 8,473 | -- | -- | -- | 4,632 | 3,841 |
| Balsam poplar | 99,922 | 64,911 | 17,149 | -- | 6,428 | 11,434 |
| Bigtooth aspen | 1,385,402 | 276,262 | 530,658 | 266,184 | 250,507 | 61,791 |
| Quaking aspen | 2,655,293 | 874,391 | 1,255,261 | 328,348 | 136,605 | 60,688 |
| Paper birch | 791,454 | 301,063 | 293,605 | 55,304 | 115,121 | 26,361 |
| River birch | 19,495 | -- | -- | 5,566 | 13,929 | -- |
| Black cherry | 262,572 | 60,306 | 14,138 | 10,963 | 66,409 | 110,756 |
| Black walnut | 84,770 | -- | -- | 1,275 | 59,651 | 23,844 |
| Butternut | 123,867 | 22,406 | 13,381 | 21,233 | 60,829 | 6,018 |
| Other hardwoods | 37,426 | 577 | -- | 5,743 | 22,074 | 9,032 |
| Total | 25,106,567 | 5,671,428 | 6,513,420 | 4,585,666 | 5,887,006 | 2,449,047 |
| All species | 35,035,413 | 9,868,680 | 10,057,438 | 6,295,736 | 6,039,113 | 2,774,446 |

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[1] International 1/4-inch rule.

Table 29.--Net volume of growing stock on commercial forest land by species group and diameter class, Wisconsin, 1983

(In thousand cubic feet)

| | | Diameter class (inches at breast height) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Species group | All classes | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-28.9 | 29.0-38.9 | 39.0+ |
| Softwoods | | | | | | | | | | | | | |
| Jack pine | 536,333 | 156,717 | 172,995 | 118,496 | 64,503 | 18,221 | 4,968 | 259 | 174 | -- | -- | -- | -- |
| Red pine | 763,226 | 218,865 | 195,820 | 118,526 | 75,069 | 40,311 | 39,043 | 36,912 | 21,196 | 11,354 | 6,130 | -- | -- |
| White pine | 565,605 | 22,685 | 41,619 | 45,631 | 57,810 | 65,782 | 67,084 | 69,954 | 55,573 | 43,562 | 70,957 | 24,452 | 496 |
| White spruce | 199,628 | 28,054 | 46,623 | 43,109 | 32,632 | 22,648 | 13,540 | 6,842 | 2,340 | 2,292 | 1,548 | -- | -- |
| Black spruce | 123,955 | 63,946 | 37,278 | 15,672 | 4,931 | 881 | 1,095 | 152 | -- | -- | -- | -- | -- |
| Balsam fir | 553,038 | 151,614 | 168,183 | 133,679 | 61,288 | 21,248 | 15,167 | 1,657 | 202 | -- | -- | -- | -- |
| Hemlock | 283,898 | 9,884 | 19,289 | 32,683 | 37,671 | 41,840 | 36,267 | 39,178 | 23,732 | 16,026 | 24,305 | 3,023 | -- |
| Tamarack | 133,877 | 50,668 | 46,609 | 18,303 | 12,180 | 3,315 | 1,151 | 1,323 | 328 | -- | -- | -- | -- |
| Eastern redcedar | 3,973 | 2,705 | 440 | 374 | -- | 160 | 294 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 471,544 | 118,105 | 131,884 | 94,770 | 65,180 | 34,734 | 16,118 | 6,709 | 2,256 | 1,148 | 640 | -- | -- |
| Other softwoods | 3,231 | 1,171 | 682 | 139 | 941 | -- | 298 | -- | -- | -- | -- | -- | -- |
| Total | 3,638,308 | 824,414 | 861,422 | 621,382 | 412,205 | 249,140 | 195,025 | 162,986 | 105,801 | 74,382 | 103,580 | 27,475 | 496 |
| Hardwoods | | | | | | | | | | | | | |
| White oak | 632,216 | 44,993 | 67,646 | 82,903 | 99,211 | 89,817 | 76,240 | 56,020 | 38,563 | 29,539 | 33,222 | 11,242 | 2,820 |
| Select red oak | 1,419,689 | 110,921 | 169,074 | 210,240 | 215,635 | 179,597 | 156,984 | 122,455 | 85,495 | 61,248 | 84,973 | 22,122 | 945 |
| Other red oak | 625,311 | 52,778 | 88,908 | 102,876 | 101,580 | 82,600 | 74,094 | 43,964 | 29,805 | 19,182 | 25,079 | 4,445 | -- |
| Select hickory | 113,434 | 15,804 | 23,598 | 22,222 | 22,217 | 13,722 | 8,282 | 4,346 | 2,063 | 609 | 571 | -- | -- |
| Other hickory | 80,472 | 35,109 | 19,327 | 9,102 | 10,300 | 3,784 | 1,641 | 705 | 253 | -- | 251 | -- | -- |
| Basswood | 835,765 | 80,322 | 154,472 | 186,725 | 145,415 | 102,206 | 60,489 | 39,864 | 23,420 | 16,769 | 18,920 | 6,300 | 863 |
| Beech | 28,707 | 1,057 | 2,637 | 2,377 | 4,347 | 4,101 | 3,150 | 4,598 | 2,323 | 2,017 | 2,100 | -- | -- |
| Yellow birch | 207,564 | 19,816 | 31,097 | 37,029 | 30,178 | 26,230 | 21,239 | 19,246 | 9,062 | 5,712 | 6,271 | 1,684 | -- |
| Hard maple | 1,494,611 | 294,142 | 299,877 | 221,980 | 170,347 | 134,764 | 115,036 | 89,242 | 61,226 | 42,178 | 53,296 | 12,231 | 292 |
| Soft maple | 1,219,528 | 358,980 | 295,040 | 202,043 | 122,251 | 86,251 | 52,394 | 36,988 | 21,930 | 14,903 | 19,287 | 8,075 | 1,386 |
| Elm | 434,129 | 33,220 | 56,825 | 74,562 | 76,945 | 59,486 | 49,226 | 31,307 | 17,115 | 10,797 | 17,256 | 6,376 | 1,014 |
| Black ash | 426,864 | 145,588 | 109,323 | 79,453 | 47,616 | 21,525 | 14,044 | 5,419 | 1,800 | 1,486 | 610 | -- | -- |
| White & green ash | 310,499 | 39,604 | 51,940 | 66,009 | 57,431 | 38,773 | 26,871 | 13,485 | 6,662 | 2,299 | 5,965 | 1,460 | -- |
| Cottonwood | 32,668 | 400 | 953 | 1,255 | 3,857 | 6,623 | 1,082 | 3,267 | 3,193 | 1,084 | 1,959 | 6,379 | 2,616 |
| Willow | 24,200 | 527 | 1,501 | 2,191 | 3,796 | 2,518 | 3,443 | 5,038 | 1,830 | 1,000 | 2,063 | 293 | -- |
| Hackberry | 2,478 | 269 | 256 | -- | 796 | 769 | -- | -- | -- | -- | 388 | -- | -- |
| Balsam poplar | 39,414 | 4,551 | 5,895 | 6,275 | 5,129 | 9,425 | 4,052 | 690 | 1,546 | 1,504 | 181 | 166 | -- |
| Bigtooth aspen | 686,786 | 71,141 | 134,620 | 177,903 | 160,696 | 79,940 | 40,831 | 15,888 | 3,398 | 1,585 | 553 | 231 | -- |
| Quaking aspen | 1,938,487 | 388,802 | 524,694 | 481,407 | 304,928 | 152,687 | 62,121 | 18,070 | 4,415 | 1,057 | 306 | -- | -- |
| Paper birch | 1,046,686 | 318,687 | 355,167 | 215,487 | 100,012 | 40,153 | 13,128 | 2,988 | 772 | 158 | 134 | -- | -- |
| River birch | 8,646 | 1,191 | 1,602 | 1,637 | 1,369 | 675 | 892 | -- | 714 | 343 | 223 | -- | -- |
| Black cherry | 164,017 | 41,699 | 35,905 | 39,064 | 18,874 | 16,151 | 5,151 | 4,221 | 1,795 | 336 | 821 | -- | -- |
| Black walnut | 22,609 | 1,978 | 2,288 | 3,435 | 4,246 | 4,986 | 1,166 | 2,916 | 696 | 657 | 241 | -- | -- |
| Butternut | 38,952 | 2,369 | 8,517 | 5,713 | 7,128 | 5,778 | 5,218 | 2,195 | 1,001 | 235 | 549 | 249 | -- |
| Other hardwoods | 26,145 | 8,163 | 6,573 | 4,671 | 2,805 | 2,598 | 221 | 457 | 657 | -- | -- | -- | -- |
| Total | 11,859,877 | 2,072,111 | 2,447,735 | 2,236,559 | 1,717,109 | 1,165,159 | 796,995 | 523,369 | 319,734 | 214,698 | 275,219 | 81,253 | 9,936 |
| All species | 15,498,185 | 2,896,525 | 3,309,157 | 2,857,941 | 2,129,314 | 1,414,299 | 992,020 | 686,355 | 425,535 | 289,080 | 378,799 | 108,728 | 10,432 |

Table 30.--Net volume of sawtimber on commercial forest land by species group and diameter class, Wisconsin, 1983

(In thousand board feet)[1]

| Species group | All classes | Diameter class (inches at breast height) 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-28.9 | 29.0-38.9 | 39.0+ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | | | | |
| Jack pine | 1,069,425 | 614,842 | 331,959 | 94,390 | 25,945 | 1,364 | 925 | -- | -- | -- | -- |
| Red pine | 1,997,086 | 683,569 | 427,496 | 229,051 | 222,434 | 211,224 | 121,834 | 65,774 | 35,704 | -- | -- |
| White pine | 2,666,253 | 181,392 | 269,342 | 332,735 | 357,697 | 386,014 | 314,620 | 251,808 | 420,250 | 149,295 | 3,100 |
| White spruce | 606,863 | 193,155 | 157,695 | 114,896 | 70,699 | 36,495 | 12,677 | 12,618 | 8,628 | -- | -- |
| Black spruce | 101,796 | 66,752 | 23,789 | 4,529 | 5,890 | 836 | -- | -- | -- | -- | -- |
| Balsam fir | 1,031,536 | 556,056 | 283,477 | 104,265 | 77,960 | 8,704 | 1,074 | -- | -- | -- | -- |
| Hemlock | 1,130,685 | 116,503 | 153,568 | 182,781 | 165,446 | 183,978 | 113,915 | 78,166 | 120,926 | 15,402 | -- |
| Tamarack | 193,864 | 95,291 | 64,831 | 18,099 | 6,406 | 7,379 | 1,858 | -- | -- | -- | -- |
| Eastern redcedar | 4,843 | 2,166 | -- | 943 | 1,734 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 1,118,865 | 461,306 | 330,413 | 181,738 | 86,408 | 36,467 | 12,491 | 6,410 | 3,632 | -- | -- |
| Other softwoods | 7,630 | 773 | 5,185 | -- | 1,672 | -- | -- | -- | -- | -- | -- |
| Total | 9,928,846 | 2,971,805 | 2,047,755 | 1,263,427 | 1,022,291 | 872,461 | 579,394 | 414,776 | 589,140 | 164,697 | 3,100 |
| Hardwoods | | | | | | | | | | | |
| White oak | 2,230,778 | -- | 547,335 | 464,666 | 381,770 | 275,608 | 187,934 | 143,329 | 161,257 | 54,998 | 13,881 |
| Select red oak | 4,555,263 | -- | 1,046,216 | 866,537 | 761,430 | 600,122 | 422,963 | 306,281 | 431,742 | 114,966 | 5,006 |
| Other red oak | 1,817,970 | -- | 483,256 | 390,234 | 351,422 | 210,024 | 143,515 | 93,200 | 123,840 | 22,479 | -- |
| Select hickory | 272,089 | -- | 123,459 | 70,741 | 41,159 | 21,023 | 10,028 | 2,910 | 2,769 | -- | -- |
| Other hickory | 86,411 | -- | 53,917 | 18,744 | 7,924 | 3,431 | 1,207 | -- | 1,188 | -- | -- |
| Basswood | 1,991,915 | -- | 685,154 | 485,950 | 291,748 | 195,147 | 116,180 | 83,918 | 96,371 | 32,801 | 4,646 |
| Beech | 117,188 | -- | 23,377 | 21,512 | 15,959 | 23,464 | 11,790 | 10,255 | 10,831 | -- | -- |
| Yellow birch | 561,730 | -- | 122,373 | 118,456 | 102,120 | 96,724 | 47,215 | 30,551 | 34,618 | 9,673 | -- |
| Hard maple | 3,384,420 | -- | 806,569 | 655,307 | 573,408 | 454,175 | 317,375 | 221,872 | 286,362 | 67,680 | 1,672 |
| Soft maple | 1,859,236 | -- | 680,246 | 443,640 | 256,300 | 175,251 | 102,419 | 69,134 | 88,672 | 37,142 | 6,432 |
| Elm | 1,182,708 | -- | 325,061 | 255,502 | 216,264 | 139,920 | 78,083 | 49,971 | 81,684 | 31,142 | 5,081 |
| Black ash | 549,728 | -- | 300,582 | 124,830 | 76,187 | 28,332 | 9,275 | 7,456 | 3,066 | -- | -- |
| White & green ash | 813,179 | -- | 331,457 | 204,301 | 134,648 | 65,668 | 31,897 | 10,843 | 27,637 | 6,728 | -- |
| Cottonwood | 130,777 | -- | 15,930 | 26,857 | 4,486 | 13,793 | 13,722 | 4,810 | 8,861 | 29,716 | 12,602 |
| Willow | 84,501 | -- | 15,803 | 10,288 | 14,202 | 21,311 | 7,911 | 4,357 | 9,284 | 1,345 | -- |
| Hackberry | 8,473 | -- | 3,283 | 3,358 | -- | -- | -- | -- | 1,832 | -- | -- |
| Balsam poplar | 99,922 | -- | 20,696 | 40,746 | 18,580 | 3,281 | 7,438 | 7,412 | 909 | 860 | -- |
| Bigtooth aspen | 1,385,402 | -- | 714,583 | 370,774 | 193,901 | 77,366 | 16,805 | 7,921 | 2,827 | 1,225 | -- |
| Quaking aspen | 2,655,293 | -- | 1,433,226 | 765,494 | 326,058 | 98,113 | 24,594 | 6,016 | 1,792 | -- | -- |
| Paper birch | 791,454 | -- | 493,152 | 206,326 | 69,771 | 16,252 | 4,292 | 890 | 771 | -- | -- |
| River birch | 19,495 | -- | 6,297 | 3,136 | 4,088 | -- | 3,308 | 1,606 | 1,060 | -- | -- |
| Black cherry | 262,572 | -- | 111,295 | 88,494 | 26,675 | 21,428 | 8,972 | 1,622 | 4,086 | -- | -- |
| Black walnut | 84,770 | -- | 26,662 | 28,400 | 6,210 | 15,388 | 3,616 | 3,289 | 1,205 | -- | -- |
| Butternut | 123,867 | -- | 42,483 | 32,103 | 27,555 | 11,293 | 5,242 | 1,189 | 2,775 | 1,227 | -- |
| Other hardwoods | 37,426 | -- | 15,548 | 14,310 | 1,235 | 2,561 | 3,772 | -- | -- | -- | -- |
| Total | 25,106,567 | -- | 8,427,960 | 5,710,706 | 3,903,100 | 2,569,675 | 1,579,553 | 1,068,832 | 1,385,439 | 411,982 | 49,320 |
| All species | 35,035,413 | 2,971,805 | 10,475,715 | 6,974,133 | 4,925,391 | 3,442,136 | 2,158,947 | 1,483,608 | 1,974,579 | 576,679 | 52,420 |

[1] International 1/4-inch rule.

Table 31.--Net volume of growing stock on commercial forest land by species group and forest type, Wisconsin, 1983

(In thousand cubic feet)

| | | Forest type | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Species group | All types | Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar | Tamarack |
| Softwoods | | | | | | | | | |
| Jack pine | 536,333 | 372,104 | 21,980 | 11,844 | 237 | -- | 366 | 417 | 331 |
| Red pine | 763,226 | 20,618 | 588,740 | 39,506 | 4,892 | 417 | 3,353 | 163 | 496 |
| White pine | 565,605 | 8,014 | 42,851 | 217,530 | 14,757 | 2,356 | 3,424 | 9,573 | 6,538 |
| White spruce | 199,628 | -- | 2,515 | 4,680 | 26,796 | 83,198 | 641 | 6,246 | 558 |
| Black spruce | 123,955 | 413 | 1,873 | 3,243 | 19,002 | 367 | 55,316 | 16,879 | 7,715 |
| Balsam fir | 553,038 | 80 | 3,851 | 7,170 | 180,454 | 2,640 | 20,416 | 37,002 | 6,897 |
| Hemlock | 283,898 | -- | 1,074 | 2,637 | 6,270 | 131 | 2,346 | 12,117 | 79 |
| Tamarack | 133,877 | -- | -- | 1,217 | 5,324 | -- | 11,733 | 14,166 | 71,850 |
| Eastern redcedar | 3,973 | 214 | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 471,544 | -- | 587 | 2,158 | 42,281 | 1,036 | 5,541 | 290,468 | 1,383 |
| Other softwoods | 3,231 | -- | 1,722 | 596 | -- | -- | -- | -- | -- |
| Total | 3,638,308 | 401,443 | 665,193 | 290,581 | 300,013 | 90,145 | 103,136 | 387,031 | 95,847 |
| Hardwoods | | | | | | | | | |
| White oak | 632,216 | 753 | 368 | 3,260 | 77 | -- | -- | 184 | -- |
| Select red oak | 1,419,689 | 4,527 | 7,279 | 3,466 | 641 | -- | 1,017 | 331 | 120 |
| Other red oak | 625,311 | 13,600 | 6,131 | 7,079 | 99 | -- | 75 | 276 | -- |
| Select hickory | 113,434 | -- | -- | 334 | -- | -- | -- | 197 | -- |
| Other hickory | 80,472 | -- | -- | -- | -- | -- | -- | 397 | -- |
| Basswood | 835,765 | -- | 209 | 837 | 167 | 299 | -- | 1,215 | -- |
| Beech | 28,707 | -- | 418 | -- | -- | -- | -- | -- | -- |
| Yellow birch | 207,564 | -- | 144 | 370 | 5,153 | -- | 432 | 10,633 | 221 |
| Hard maple | 1,494,611 | -- | 2,360 | 1,859 | 2,362 | 398 | 233 | 248 | 105 |
| Soft maple | 1,219,528 | 432 | 5,214 | 10,168 | 12,754 | 688 | 1,678 | 7,454 | 3,419 |
| Elm | 434,129 | 307 | 1,358 | 639 | 2,099 | 150 | -- | 2,319 | 636 |
| Black ash | 426,864 | -- | -- | 1,161 | 12,478 | 174 | -- | 18,169 | 483 |
| White & green ash | 310,499 | -- | 1,421 | -- | 116 | 837 | -- | 446 | -- |
| Cottonwood | 32,668 | 98 | -- | 4,887 | -- | -- | -- | -- | -- |
| Willow | 24,200 | -- | -- | -- | -- | -- | -- | 438 | -- |
| Hackberry | 2,478 | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 39,414 | -- | -- | -- | 1,392 | 325 | 200 | 1,037 | -- |
| Bigtooth aspen | 686,786 | 4,140 | 3,380 | 4,596 | 1,595 | 185 | 1,037 | 1,250 | 3,295 |
| Quaking aspen | 1,938,487 | 14,361 | 21,469 | 29,130 | 34,620 | 4,413 | 12,736 | 12,014 | 4,489 |
| Paper birch | 1,046,686 | 2,019 | 5,883 | 9,480 | 21,469 | 522 | 3,805 | 18,015 | 5,459 |
| River birch | 8,646 | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 164,017 | -- | 404 | 1,242 | 766 | 113 | 151 | -- | -- |
| Black walnut | 22,609 | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 38,952 | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | 26,145 | -- | 581 | -- | -- | -- | -- | -- | -- |
| Total | 11,859,877 | 40,237 | 56,619 | 78,508 | 95,788 | 8,104 | 21,364 | 74,623 | 18,227 |
| All species | 15,498,185 | 441,680 | 721,812 | 369,089 | 395,801 | 98,249 | 124,500 | 461,654 | 114,074 |

(Table 31 continued on next page)

(Table 31 continued)

|  | Forest type |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
| Species group | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Non-stocked |
| Softwoods |  |  |  |  |  |  |  |
| Jack pine | 73,808 | 1,208 | 5,577 | 43,668 | 3,363 | -- | 1,430 |
| Red pine | 26,483 | 643 | 16,309 | 47,230 | 14,376 | -- | -- |
| White pine | 46,125 | 23,586 | 130,134 | 44,758 | 15,763 | -- | 196 |
| White spruce | 445 | 7,737 | 19,974 | 36,059 | 10,578 | -- | 201 |
| Black spruce | -- | 2,721 | 3,166 | 10,492 | 2,768 | -- | -- |
| Balsam fir | 1,191 | 51,343 | 107,962 | 101,446 | 32,513 | -- | 73 |
| Hemlock | 1,161 | 17,614 | 232,214 | 5,163 | 3,092 | -- | -- |
| Tamarack | 562 | 12,111 | 4,934 | 7,813 | 3,121 | -- | 1,046 |
| Eastern redcedar | 2,063 | 1,277 | 419 | -- | -- | -- | -- |
| Northern white-cedar | 238 | 49,374 | 54,710 | 14,502 | 9,266 | -- | -- |
| Other softwoods | 287 | -- | 70 | -- | -- | 556 | -- |
| Total | 152,363 | 167,614 | 575,469 | 311,131 | 94,840 | 556 | 2,946 |
| Hardwoods |  |  |  |  |  |  |  |
| White oak | 489,145 | 19,715 | 78,529 | 29,057 | 9,434 | -- | 1,694 |
| Select red oak | 922,648 | 17,446 | 287,090 | 121,880 | 52,592 | -- | 652 |
| Other red oak | 515,727 | 8,842 | 26,575 | 40,787 | 3,103 | -- | 3,017 |
| Select hickory | 92,249 | 207 | 16,709 | 333 | 3,405 | -- | -- |
| Other hickory | 38,557 | 673 | 38,366 | 2,479 | -- | -- | -- |
| Basswood | 72,711 | 29,290 | 698,273 | 25,398 | 6,547 | -- | 819 |
| Beech | 299 | 554 | 27,436 | -- | -- | -- | -- |
| Yellow birch | 1,007 | 19,189 | 163,473 | 4,129 | 2,813 | -- | -- |
| Hard maple | 51,853 | 15,421 | 1,355,943 | 48,642 | 15,086 | -- | 101 |
| Soft maple | 101,917 | 289,212 | 540,897 | 195,857 | 49,727 | -- | 111 |
| Elm | 48,467 | 94,293 | 255,712 | 21,388 | 5,633 | -- | 1,128 |
| Black ash | 8,409 | 260,341 | 92,375 | 26,272 | 6,097 | -- | 905 |
| White & green ash | 27,301 | 71,982 | 191,697 | 11,986 | 4,533 | -- | 180 |
| Cottonwood | 6,972 | 12,392 | 4,733 | 3,353 | 233 | -- | -- |
| Willow | -- | 18,109 | 3,247 | 1,767 | 386 | -- | 253 |
| Hackberry | 921 | 581 | 976 | -- | -- | -- | -- |
| Balsam poplar | 1,156 | 6,294 | 4,334 | 22,837 | 1,839 | -- | -- |
| Bigtooth aspen | 145,677 | 4,555 | 100,142 | 388,571 | 28,363 | -- | -- |
| Quaking aspen | 89,567 | 62,761 | 273,905 | 1,293,698 | 82,300 | -- | 3,024 |
| Paper birch | 111,849 | 40,176 | 202,323 | 265,809 | 358,814 | -- | 1,063 |
| River birch | 1,116 | 7,530 | -- | -- | -- | -- | -- |
| Black cherry | 57,727 | 3,058 | 73,195 | 24,323 | 3,038 | -- | -- |
| Black walnut | 17,986 | -- | 4,167 | -- | -- | -- | 456 |
| Butternut | 17,002 | 243 | 19,306 | 1,837 | 311 | -- | 253 |
| Other hardwoods | 3,876 | 10,503 | 10,442 | 594 | 149 | -- | -- |
| Total | 2,824,139 | 993,367 | 4,469,845 | 2,530,997 | 634,403 | -- | 13,656 |
| All species | 2,976,502 | 1,160,981 | 5,045,314 | 2,842,128 | 729,243 | 556 | 16,602 |

### Table 32.--Net volume of sawtimber on commercial forest land by species group and forest type, Wisconsin, 1983

(In thousand board feet)[1]

| Species group | All types | Forest type<br>Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar | Tamarack |
|---|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | | |
| Jack pine | 1,069,425 | 640,234 | 43,565 | 36,157 | 1,258 | -- | 710 | -- | -- |
| Red pine | 1,997,086 | 79,464 | 1,226,095 | 175,853 | 25,884 | -- | 17,844 | 911 | 2,846 |
| White pine | 2,666,253 | 32,108 | 172,307 | 1,003,904 | 74,808 | 12,618 | 12,424 | 44,300 | 28,493 |
| White spruce | 606,863 | -- | 8,743 | 22,215 | 93,320 | 188,087 | 2,603 | 19,902 | 1,811 |
| Black spruce | 101,796 | 488 | -- | 4,406 | 22,260 | 767 | 27,767 | 19,552 | 5,917 |
| Balsam fir | 1,031,536 | -- | 6,167 | 17,920 | 316,487 | 5,301 | 72,294 | 28,539 | 2,756 |
| Hemlock | 1,130,685 | -- | 2,339 | 10,464 | 25,008 | 648 | 9,825 | 43,089 | 339 |
| Tamarack | 193,864 | -- | -- | 2,799 | 11,916 | -- | 4,223 | 20,094 | 64,873 |
| Eastern redcedar | 4,843 | 1,272 | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 1,118,865 | -- | 1,916 | 9,149 | 123,315 | -- | 14,805 | 579,374 | 1,693 |
| Other softwoods | 7,630 | -- | 6,238 | 1,392 | -- | -- | -- | -- | -- |
| Total | 9,928,846 | 753,566 | 1,467,370 | 1,284,259 | 694,256 | 207,421 | 162,495 | 755,761 | 108,728 |
| Hardwoods | | | | | | | | | |
| White oak | 2,230,778 | -- | 2,079 | 9,108 | -- | -- | -- | 1,004 | -- |
| Select red oak | 4,555,263 | 9,787 | 8,884 | 11,485 | 2,683 | -- | 1,401 | 1,703 | 595 |
| Other red oak | 1,817,970 | 29,514 | 16,400 | 18,642 | -- | -- | 411 | 1,388 | -- |
| Select hickory | 272,089 | -- | -- | -- | -- | -- | -- | 1,146 | -- |
| Other hickory | 86,411 | -- | -- | -- | -- | -- | -- | 1,188 | -- |
| Basswood | 1,991,915 | -- | 960 | 2,255 | 855 | -- | -- | 5,284 | -- |
| Beech | 117,188 | -- | 1,110 | -- | -- | -- | -- | -- | -- |
| Yellow birch | 561,730 | -- | 611 | 1,307 | 17,925 | -- | 1,772 | 27,955 | 629 |
| Hard maple | 3,384,420 | -- | 1,629 | 7,033 | 4,952 | 1,507 | 698 | 1,330 | -- |
| Soft maple | 1,859,236 | -- | 1,084 | 20,087 | 13,112 | 2,016 | 2,106 | 11,348 | 3,917 |
| Elm | 1,182,708 | 1,357 | -- | 1,825 | 6,583 | 663 | -- | 6,817 | 1,838 |
| Black ash | 549,728 | -- | -- | 5,002 | 12,729 | 1,011 | -- | 12,672 | -- |
| White & green ash | 813,179 | -- | 7,302 | -- | -- | -- | -- | 2,448 | -- |
| Cottonwood | 130,777 | -- | -- | 19,577 | -- | -- | -- | -- | -- |
| Willow | 84,501 | -- | -- | -- | -- | -- | -- | 1,896 | -- |
| Hackberry | 8,473 | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 99,922 | -- | -- | -- | 626 | 705 | -- | 2,999 | -- |
| Bigtooth aspen | 1,385,402 | 3,805 | 4,677 | 5,812 | 1,006 | -- | 4,236 | 2,085 | 3,319 |
| Quaking aspen | 2,655,293 | 9,571 | 29,442 | 40,106 | 49,346 | 5,246 | 23,591 | 21,214 | 2,170 |
| Paper birch | 791,454 | 1,655 | 8,171 | 17,575 | 15,797 | -- | 3,747 | 15,506 | 3,529 |
| River birch | 19,495 | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 262,572 | -- | 1,147 | -- | 2,578 | 752 | -- | -- | -- |
| Black walnut | 84,770 | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 123,867 | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | 37,426 | -- | 3,128 | -- | -- | -- | -- | -- | -- |
| Total | 25,106,567 | 55,689 | 86,624 | 159,814 | 128,192 | 11,900 | 37,962 | 117,983 | 15,997 |
| All species | 35,035,413 | 809,255 | 1,553,994 | 1,444,073 | 822,448 | 219,321 | 200,457 | 873,744 | 124,725 |

(Table 32 continued on the next page)

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[1] International 1/4-inch rule.

(Table 32 continued)

| | Forest type | | | | | | |
|---|---|---|---|---|---|---|---|
| Species group | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Non-stocked |
| **Softwoods** | | | | | | | |
| Jack pine | 185,144 | 4,293 | 17,634 | 128,189 | 11,457 | -- | 784 |
| Red pine | 82,188 | 3,685 | 83,787 | 218,299 | 80,230 | -- | -- |
| White pine | 219,600 | 112,575 | 661,760 | 220,769 | 69,693 | -- | 894 |
| White spruce | -- | 30,333 | 90,146 | 115,384 | 33,258 | -- | 1,061 |
| Black spruce | -- | 8,070 | 6,378 | 5,418 | 773 | -- | -- |
| Balsam fir | 556 | 90,621 | 246,825 | 182,410 | 61,660 | -- | -- |
| Hemlock | 5,018 | 52,194 | 949,552 | 21,031 | 11,178 | -- | -- |
| Tamarack | 2,251 | 46,212 | 9,417 | 22,457 | 5,585 | -- | 4,037 |
| Eastern redcedar | 1,734 | -- | 1,837 | -- | -- | -- | -- |
| Northern white-cedar | -- | 135,254 | 199,877 | 28,623 | 24,859 | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- |
| Total | 496,491 | 483,237 | 2,267,213 | 942,580 | 298,693 | -- | 6,776 |
| **Hardwoods** | | | | | | | |
| White oak | 1,744,390 | 72,121 | 300,314 | 66,687 | 29,984 | -- | 5,091 |
| Select red oak | 3,093,602 | 63,952 | 978,223 | 230,071 | 149,533 | -- | 3,344 |
| Other red oak | 1,491,354 | 33,407 | 97,945 | 113,120 | 10,244 | -- | 5,545 |
| Select hickory | 211,791 | 985 | 48,221 | -- | 9,946 | -- | -- |
| Other hickory | 36,631 | -- | 47,557 | 1,035 | -- | -- | -- |
| Basswood | 191,283 | 67,016 | 1,673,290 | 38,928 | 10,422 | -- | 1,622 |
| Beech | -- | 1,042 | 115,036 | -- | -- | -- | -- |
| Yellow birch | 2,298 | 43,568 | 455,950 | 4,787 | 4,928 | -- | -- |
| Hard maple | 138,380 | 19,058 | 3,167,909 | 25,985 | 15,939 | -- | -- |
| Soft maple | 151,249 | 727,650 | 810,001 | 84,325 | 32,341 | -- | -- |
| Elm | 128,936 | 283,588 | 687,254 | 50,671 | 9,740 | -- | 3,436 |
| Black ash | 14,713 | 364,880 | 120,618 | 11,261 | 6,842 | -- | -- |
| White & green ash | 61,490 | 231,850 | 483,256 | 15,993 | 9,766 | -- | 1,074 |
| Cottonwood | 27,697 | 52,183 | 19,789 | 10,466 | 1,065 | -- | -- |
| Willow | -- | 64,707 | 12,967 | 2,278 | 1,631 | -- | 1,022 |
| Hackberry | 3,841 | 2,340 | 2,292 | -- | -- | -- | -- |
| Balsam poplar | 4,483 | 18,133 | 17,631 | 52,638 | 2,707 | -- | -- |
| Bigtooth aspen | 347,769 | 14,793 | 227,912 | 695,225 | 74,763 | -- | -- |
| Quaking aspen | 127,030 | 100,856 | 579,951 | 1,531,421 | 134,022 | -- | 1,327 |
| Paper birch | 78,513 | 47,416 | 225,213 | 129,239 | 245,093 | -- | -- |
| River birch | 3,733 | 15,762 | -- | -- | -- | -- | -- |
| Black cherry | 97,679 | 1,997 | 123,399 | 31,396 | 3,624 | -- | -- |
| Black walnut | 71,246 | -- | 12,247 | -- | -- | -- | 1,277 |
| Butternut | 50,703 | 1,345 | 63,926 | 7,893 | -- | -- | -- |
| Other hardwoods | 7,304 | 15,940 | 10,146 | 908 | -- | -- | -- |
| Total | 8,086,115 | 2,244,589 | 10,281,047 | 3,104,327 | 752,590 | -- | 23,738 |
| All species | 8,582,606 | 2,727,826 | 12,548,260 | 4,046,907 | 1,051,283 | -- | 30,514 |

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Table 33.--Net volume of growing stock on commercial forest land by species group and ownership class, Wisconsin, 1983

(In thousand cubic feet)

| | | Ownership class | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Species group | All owners | National Forest | Misc. federal | State | County & municipal | Indian | Forest industry | Farmer | Misc. priv.-corp. | Misc. priv.-indiv. |
| Softwoods | | | | | | | | | | |
| Jack pine | 536,333 | 67,884 | 20,571 | 30,964 | 108,184 | 9,488 | 58,530 | 59,147 | 18,696 | 162,869 |
| Red pine | 763,226 | 119,247 | 8,932 | 44,887 | 127,627 | 19,259 | 50,874 | 99,180 | 43,218 | 250,002 |
| White pine | 565,605 | 44,455 | 9,322 | 27,715 | 54,596 | 81,773 | 30,795 | 116,803 | 24,319 | 175,827 |
| White spruce | 199,628 | 87,585 | 200 | 8,167 | 28,388 | 352 | 20,372 | 8,801 | 7,146 | 38,617 |
| Black spruce | 123,955 | 20,989 | -- | 9,574 | 22,803 | 8,184 | 19,217 | 6,569 | 1,877 | 34,742 |
| Balsam fir | 553,038 | 69,408 | -- | 22,782 | 121,758 | 14,739 | 70,706 | 39,844 | 28,082 | 185,719 |
| Hemlock | 283,898 | 44,165 | -- | 5,476 | 18,883 | 74,560 | 52,844 | 29,876 | 16,734 | 41,360 |
| Tamarack | 133,877 | 11,320 | 827 | 6,970 | 14,723 | 1,218 | 9,993 | 23,117 | 5,472 | 60,237 |
| Eastern redcedar | 3,973 | -- | -- | -- | -- | -- | -- | 3,052 | -- | 921 |
| Northern white-cedar | 471,544 | 71,339 | -- | 17,077 | 56,794 | 34,366 | 48,079 | 90,511 | 15,072 | 138,306 |
| Other softwoods | 3,231 | -- | -- | 341 | -- | -- | -- | 1,024 | 139 | 1,727 |
| Total | 3,638,308 | 536,392 | 39,852 | 173,953 | 553,756 | 243,939 | 361,410 | 477,924 | 160,755 | 1,090,327 |
| Hardwoods | | | | | | | | | | |
| White oak | 632,216 | 2,824 | 3,195 | 17,575 | 21,700 | 3,318 | 2,956 | 340,548 | 26,620 | 213,480 |
| Select red oak | 1,419,689 | 101,229 | 9.846 | 38,069 | 135,792 | 44,289 | 55,580 | 558,271 | 56,168 | 420,445 |
| Other red oak | 625,311 | 104 | 13,446 | 19,658 | 53,179 | 4,119 | 10,142 | 250,527 | 31,809 | 242,327 |
| Select hickory | 113,434 | -- | -- | 1,249 | -- | -- | 332 | 71,331 | 8,555 | 31,967 |
| Other hickory | 80,472 | 1,206 | -- | 597 | 2,285 | 1,993 | 5,326 | 45,860 | 3,955 | 19,250 |
| Basswood | 835,765 | 110,491 | 213 | 12,981 | 119,142 | 44,602 | 104,781 | 161,873 | 28,646 | 253,036 |
| Beech | 28,707 | -- | -- | -- | -- | 8,369 | 974 | 12,309 | 1,975 | 5,080 |
| Yellow birch | 207,564 | 40,789 | -- | 4,744 | 21,011 | 22,519 | 43,876 | 21,194 | 13,441 | 39,990 |
| Hard maple | 1,494,611 | 237,815 | 770 | 32,029 | 153,942 | 86,744 | 219,920 | 275,298 | 70,976 | 417,117 |
| Soft maple | 1,219,528 | 105,573 | 29,446 | 47,638 | 188,988 | 34,425 | 95,276 | 270,631 | 45,507 | 402,044 |
| Elm | 434,129 | 20,054 | 1,137 | 15,454 | 43,728 | 9,997 | 39,905 | 136,703 | 16,905 | 150,246 |
| Black ash | 426,864 | 30,626 | 1,161 | 18,261 | 77,500 | 6,786 | 38,330 | 91,029 | 14,397 | 148,774 |
| White & green ash | 310,499 | 20,344 | 2,743 | 6,163 | 25,751 | 6,980 | 28,685 | 117,160 | 13,642 | 89,031 |
| Cottonwood | 32,668 | -- | 3,132 | 1,161 | 1,566 | -- | 269 | 14,331 | 6,123 | 6,086 |
| Willow | 24,200 | -- | 2,322 | 2,094 | 524 | -- | 616 | 12,072 | 2,915 | 3,657 |
| Hackberry | 2,478 | -- | -- | -- | -- | -- | -- | 1,399 | 110 | 969 |
| Balsam poplar | 39,414 | 2,740 | -- | 1,199 | 10.701 | 239 | 1,446 | 9,305 | 1,220 | 12,564 |
| Bigtooth aspen | 686,786 | 77,519 | 5,183 | 19,965 | 95,486 | 25,445 | 22,368 | 170,474 | 33,228 | 237,118 |
| Quaking aspen | 1,938,487 | 157,889 | 20,689 | 73,967 | 384,709 | 58,309 | 125,540 | 309,739 | 91,474 | 716,171 |
| Paper birch | 1,046,686 | 88,337 | 3,893 | 47,477 | 175,059 | 29,229 | 71,492 | 187,305 | 67,579 | 376,315 |
| River birch | 8,646 | -- | 642 | 1,172 | 126 | -- | -- | 2,235 | 2,435 | 2,036 |
| Black cherry | 164,017 | 11,493 | -- | 4,445 | 12,403 | 1,108 | 8,744 | 69,901 | 7,666 | 48,257 |
| Black walnut | 22,609 | -- | -- | -- | 510 | -- | -- | 14,643 | 383 | 7,073 |
| Butternut | 38,952 | 849 | -- | 335 | 488 | 1,245 | 1,425 | 20,516 | 4,114 | 9,980 |
| Other hardwoods | 26,145 | -- | 143 | 483 | 137 | 104 | -- | 16,164 | -- | 9,114 |
| Total | 11,859,877 | 1,009,882 | 97,961 | 366,716 | 1,524,727 | 389,820 | 877,983 | 3,180,818 | 549,843 | 3,862,127 |
| All species | 15,498,185 | 1,546,274 | 137,813 | 540,669 | 2,078,483 | 633,759 | 1,239,393 | 3,658,742 | 710,598 | 4,952,454 |

Table 34.--Net volume of sawtimber on commercial forest land by species group and ownership class, Wisconsin, 1983

(In thousand board feet)[1]

| Species group | All owners | Ownership class | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | National Forest | Misc. federal | State | County & municipal | Indian | Forest industry | Farmer | Misc. priv.-corp. | Misc. priv.-indiv. |
| Softwoods | | | | | | | | | | |
| Jack pine | 1,069,425 | 111,175 | 51,002 | 69,891 | 175,710 | 33,881 | 81,145 | 152,556 | 57,652 | 336,413 |
| Red pine | 1,997,086 | 483,109 | 33,546 | 131,438 | 314,462 | 95,035 | 143,090 | 198,062 | 74,969 | 523,375 |
| White pine | 2,666,253 | 215,656 | 39,272 | 125,370 | 265,569 | 433,998 | 139,642 | 548,274 | 119,740 | 778,732 |
| White spruce | 606,863 | 207,937 | 665 | 27,241 | 107,672 | 857 | 76,145 | 34,483 | 24,721 | 127,142 |
| Black spruce | 101,796 | 14,500 | -- | 3,433 | 25,639 | 6,898 | 16,817 | 5,541 | 2,992 | 25,976 |
| Balsam fir | 1,031,536 | 172,186 | -- | 31,981 | 225,689 | 23,758 | 168,090 | 60,735 | 42,435 | 306,662 |
| Hemlock | 1,130,685 | 183,575 | -- | 19,800 | 73,379 | 318,637 | 227,462 | 92,863 | 65,850 | 149,119 |
| Tamarack | 193,864 | 5,745 | 1,567 | 18,533 | 17,218 | 4,636 | 12,337 | 39,072 | 14,597 | 80,159 |
| Eastern redcedar | 4,843 | -- | -- | -- | -- | -- | -- | 3,949 | -- | 894 |
| Northern white-cedar | 1,118,865 | 149,429 | -- | 54,491 | 159,598 | 108,312 | 160,787 | 146,996 | 35,482 | 303,779 |
| Other softwoods | 7,630 | -- | -- | -- | -- | -- | -- | 4,573 | 773 | 2,284 |
| Total | 9,928,846 | 1,543,303 | 126,052 | 482,178 | 1,364,936 | 1,026,012 | 1,025,515 | 1,287,104 | 439,211 | 2,634,535 |
| Hardwoods | | | | | | | | | | |
| White oak | 2,230,77[illegible] | -- | 9,868 | 71,494 | 39,878 | 9,825 | 7,703 | 1,278,010 | 90,267 | 723,733 |
| Select red oak | 4,55[illegible] | 124,629 | 17,730 | 104,167 | 269,950 | 154,406 | 150,174 | 2,202,228 | 192,721 | 1,339,248 |
| Other red oak | 1,817,9[illegible] | -- | 24,737 | 55,171 | 103,816 | 15,419 | 22,754 | 847,373 | 77,838 | 670,862 |
| Select hickory | 272,0[illegible] | -- | -- | 2,279 | -- | -- | -- | 162,070 | 28,950 | 78,790 |
| Other hickory | 86,411 | 2,550 | -- | 1,710 | 767 | 3,829 | 5,822 | 47,614 | 2,447 | 21,672 |
| Basswood | 1,991,915 | [illegible],190 | -- | 26,364 | 205,704 | 146,318 | 214,488 | 530,781 | 71,521 | 581,549 |
| Beech | 117,188 | -- | -- | -- | -- | 32,273 | 3,868 | 56,015 | 10,747 | 14,285 |
| Yellow birch | 561,730 | 102,203 | -- | 17,995 | 66,431 | 66,113 | 146,736 | 39,719 | 34,713 | 87,820 |
| Hard maple | 3,384,420 | 327,392 | 3,571 | 75,924 | 209,366 | 285,988 | 524,698 | 903,281 | 140,936 | 913,264 |
| Soft maple | 1,859,236 | 145,187 | 76,554 | 99,466 | 191,663 | 42,129 | 120,326 | 620,662 | 52,245 | 511,004 |
| Elm | 1,182,708 | 46,487 | 2,770 | 44,654 | 117,948 | 36,592 | 109,240 | 366,875 | 40,754 | 417,388 |
| Black ash | 549,728 | 25,426 | 967 | 33,415 | 100,264 | 15,291 | 58,133 | 115,540 | 22,635 | 178,057 |
| White & green ash | 813,179 | 58,420 | 11,627 | 18,029 | 63,763 | 9,206 | 91,110 | 293,557 | 33,707 | 233,760 |
| Cottonwood | 130,777 | -- | 13,246 | 4,567 | 7,387 | -- | 1,239 | 58,732 | 22,319 | 23,287 |
| Willow | 84,501 | -- | 9,691 | 6,656 | 1,591 | -- | 2,570 | 42,783 | 8,641 | 12,569 |
| Hackberry | 8,473 | -- | -- | -- | -- | -- | -- | 4,632 | -- | 3,841 |
| Balsam poplar | 99,922 | 6,199 | -- | 3,322 | 24,766 | -- | 4,493 | 26,178 | 2,585 | 32,379 |
| Bigtooth aspen | 1,385,402 | 125,828 | 5,356 | 43,468 | 130,059 | 50,586 | 45,836 | 426,967 | 69,138 | 488,164 |
| Quaking aspen | 2,655,293 | 239,029 | 14,388 | 90,316 | 476,808 | 105,094 | 196,730 | 437,009 | 117,694 | 978,225 |
| Paper birch | 791,454 | 64,920 | 913 | 34,814 | 98,602 | 31,694 | 65,213 | 149,221 | 53,943 | 292,134 |
| River birch | 19,495 | -- | 2,967 | 2,202 | -- | -- | -- | 8,153 | 970 | 5,203 |
| Black cherry | 262,572 | 25,482 | -- | 5,829 | 12,331 | 2,886 | 9,429 | 118,792 | 16,483 | 71,340 |
| Black walnut | 84,770 | -- | -- | -- | 3,408 | -- | -- | 50,547 | 2,311 | 28,504 |
| Butternut | 123,867 | 4,839 | -- | 1,803 | 996 | 3,866 | 6,465 | 66,438 | 13,345 | 26,115 |
| Other hardwoods | 37,426 | -- | -- | 1,851 | 799 | 577 | -- | 25,060 | -- | 9,139 |
| Total | 25,106,567 | 1,513,781 | 194,385 | 745,496 | 2,126,307 | 1,012,092 | 1,787,027 | 8,878,237 | 1,106,910 | 7,742,332 |
| All species | 35,035,413 | 3,057,084 | 320,437 | 1,227,674 | 3,491,243 | 2,038,104 | 2,812,542 | 10,165,341 | 1,546,121 | 10,376,867 |

[1] International 1/4-inch rule.

Table 35.--Net volume of growing stock on commercial forest land by forest type and stand-age class, Wisconsin, 1983

(In thousand cubic feet)

| Forest type | All classes | Stand-age class (years) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 |
| Jack pine | 441,680 | 4,994 | 25,061 | 39,500 | 114,909 | 161,553 | 68,536 | 9,669 | 14,560 |
| Red pine | 721,812 | 4,255 | 70,390 | 207,740 | 194,256 | 108,425 | 50,799 | 14,799 | 19,290 |
| White pine | 369,089 | 4,649 | 11,564 | 13,815 | 17,896 | 39,964 | 29,520 | 42,672 | 71,694 |
| Balsam fir | 395,801 | 19,736 | 14,827 | 23,666 | 36,282 | 66,999 | 114,922 | 62,097 | 17,374 |
| White spruce | 98,249 | 373 | 4,688 | 18,454 | 41,587 | 10,288 | 16,742 | 6,117 | -- |
| Black spruce | 124,500 | 4,416 | 8,027 | 15,587 | 8,700 | 14,388 | 9,752 | 10,208 | 37,985 |
| Northern white-cedar | 461,654 | 2,453 | 9,605 | 9,270 | 6,047 | 51,467 | 45,671 | 55,318 | 37,506 |
| Tamarack | 114,074 | 7,028 | 8,954 | 9,245 | 8,158 | 18,514 | 14,078 | 18,281 | 14,658 |
| Oak-hickory | 2,976,502 | 91,042 | 40,040 | 49,756 | 108,020 | 385,059 | 562,850 | 304,874 | 365,620 |
| Elm-ash-soft maple | 1,160,981 | 39,085 | 37,273 | 56,749 | 108,191 | 152,560 | 132,534 | 153,102 | 173,547 |
| Maple-birch | 5,045,314 | 92,082 | 128,574 | 162,001 | 298,472 | 806,595 | 970,200 | 750,001 | 362,517 |
| Aspen | 2,842,128 | 166,063 | 149,627 | 190,336 | 485,848 | 901,868 | 578,719 | 211,645 | 93,656 |
| Paper birch | 729,243 | 15,366 | 29,698 | 42,609 | 111,584 | 186,816 | 190,041 | 122,357 | 25,368 |
| Exotic | 556 | -- | 556 | -- | -- | -- | -- | -- | -- |
| Nonstocked | 16,602 | 16,602 | -- | -- | -- | -- | -- | -- | -- |
| All types | 15,498,185 | 468,144 | 538,884 | 838,728 | 1,539,950 | 2,904,496 | 2,784,364 | 1,761,140 | 1,233,775 |

(Table 35 continued)

(Table 35 continued)

| Forest type | Stand-age class | | | | |
|---|---|---|---|---|---|
| | 81-90 | 91-100 | 101-120 | 121-140 | 141+ |
| Jack pine | 2,898 | -- | -- | -- | -- |
| Red pine | 18,597 | 24,714 | 8,547 | -- | -- |
| White pine | 53,626 | 4,552 | 23,443 | 20,741 | 34,953 |
| Balsam fir | 16,102 | 3,302 | 12,716 | 6,259 | 1,519 |
| White spruce | -- | -- | -- | -- | -- |
| Black spruce | 12,072 | 2,996 | -- | 369 | -- |
| Northern white-cedar | 35,599 | 85,070 | 40,991 | 40,770 | 41,887 |
| Tamarack | 9,749 | -- | 2,957 | 1,474 | 978 |
| Oak-hickory | 297,881 | 246,845 | 259,977 | 173,875 | 90,663 |
| Elm-ash-soft maple | 107,828 | 86,297 | 64,116 | 33,375 | 16,324 |
| Maple-birch | 376,883 | 307,316 | 334,786 | 194,434 | 261,453 |
| Aspen | 55,819 | 8,547 | -- | -- | -- |
| Paper birch | 2,039 | 715 | 2,650 | -- | -- |
| Exotic | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| All types | 989,093 | 770,354 | 750,183 | 471,297 | 447,777 |

### Table 36.--Net volume of sawtimber on commercial forest land by forest type and stand-age class, Wisconsin, 1983

(In thousand board feet)[1/]

| Forest type | All classes | Stand-age class (years) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 |
| Jack pine | 809,255 | 12,550 | 23,852 | 33,932 | 156,007 | 303,726 | 176,248 | 33,711 | 55,517 |
| Red pine | 1,553,994 | 17,590 | 43,253 | 111,543 | 410,765 | 386,841 | 195,355 | 57,521 | 91,263 |
| White pine | 1,444,073 | 20,024 | 9,086 | 45,086 | 46,852 | 130,909 | 98,896 | 151,103 | 308,878 |
| Balsam fir | 822,448 | 42,094 | 18,934 | 33,153 | 60,776 | 119,868 | 257,789 | 121,029 | 31,350 |
| White spruce | 219,321 | -- | 8,290 | 13,869 | 109,525 | 20,983 | 39,796 | 26,858 | -- |
| Black spruce | 200,457 | 3,301 | 11,082 | 18,883 | 7,442 | 8,990 | 7,106 | 8,641 | 107,634 |
| Northern white-cedar | 873,744 | 3,970 | 5,417 | 14,870 | 8,713 | 77,379 | 60,549 | 61,536 | 56,383 |
| Tamarack | 124,725 | 9,208 | 9,353 | 6,795 | 3,747 | 14,014 | 8,421 | 24,224 | 24,301 |
| Oak-hickory | 8,582,606 | 217,758 | 105,159 | 93,675 | 158,521 | 645,694 | 1,119,852 | 844,746 | 1,177,060 |
| Elm-ash-soft maple | 2,727,826 | 84,807 | 72,876 | 65,740 | 146,956 | 280,405 | 256,236 | 350,078 | 477,911 |
| Maple-birch | 12,548,260 | 171,838 | 293,983 | 273,461 | 447,291 | 1,206,295 | 1,794,440 | 1,761,811 | 1,089,255 |
| Aspen | 4,046,907 | 264,419 | 168,174 | 210,478 | 537,191 | 995,646 | 945,921 | 460,738 | 273,493 |
| Paper birch | 1,051,283 | 23,209 | 31,355 | 29,442 | 132,580 | 222,493 | 306,240 | 230,605 | 58,137 |
| Exotic | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 30,514 | 30,514 | -- | -- | -- | -- | -- | -- | -- |
| All types | 35,035,413 | 901,292 | 800,814 | 950,927 | 2,226,366 | 4,413,243 | 5,266,849 | 4,132,601 | 3,751,182 |

(Table 36 continued)

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[1/] International 1/4-inch rule.

(Table 36 continued)

| Forest type | Stand-age class | | | | |
|---|---|---|---|---|---|
| | 81-90 | 91-100 | 101-120 | 121-140 | 141+ |
| Jack pine | 13,712 | -- | -- | -- | -- |
| Red pine | 87,132 | 115,020 | 37,711 | -- | -- |
| White pine | 231,856 | 22,932 | 99,053 | 95,442 | 183,956 |
| Balsam fir | 50,596 | 12,558 | 44,771 | 22,222 | 7,308 |
| White spruce | -- | -- | -- | -- | -- |
| Black spruce | 17,841 | 8,333 | -- | 1,204 | -- |
| Northern white-cedar | 57,047 | 155,513 | 112,279 | 114,016 | 146,072 |
| Tamarack | 15,367 | -- | 3,877 | 4,509 | 909 |
| Oak-hickory | 1,080,031 | 984,003 | 1,028,946 | 743,730 | 383,421 |
| Elm-ash-soft maple | 334,263 | 290,006 | 199,919 | 111,352 | 57,277 |
| Maple-birch | 1,272,304 | 1,118,408 | 1,252,909 | 779,352 | 1,086,913 |
| Aspen | 157,370 | 33,477 | -- | -- | -- |
| Paper birch | 6,901 | 1,814 | 8,507 | -- | -- |
| Exotic | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| All types | 3,324,420 | 2,742,064 | 2,787,972 | 1,871,827 | 1,865,856 |

### Table 37.--Net volume of growing stock on commercial forest land by forest type, stand-size class, and basal-area class, Wisconsin, 1983

(In thousand cubic feet)

| Forest type and stand-size class | All classes | Basal-area class (square feet per acre) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 |
| **Jack pine** | | | | | | | | |
| Sawtimber | 108,406 | -- | -- | -- | 3,702 | 1,847 | 8,151 | 9,316 |
| Poletimber | 289,223 | -- | -- | -- | 3,103 | 5,472 | 13,142 | 15,311 |
| Sapling & seedling | 44,051 | 84 | 662 | 2,060 | 3,174 | 3,588 | 4,912 | 6,124 |
| All stands | 441,680 | 84 | 662 | 2,060 | 9,979 | 10,907 | 26,205 | 30,751 |
| **Red pine** | | | | | | | | |
| Sawtimber | 307,287 | -- | -- | -- | 1,655 | 2,017 | 1,542 | -- |
| Poletimber | 392,761 | -- | -- | -- | -- | 480 | 3,158 | 3,712 |
| Sapling & seedling | 21,764 | 152 | 306 | 243 | 2,279 | 1,440 | 4,833 | -- |
| All stands | 721,812 | 152 | 306 | 243 | 3,934 | 3,937 | 9,533 | 3,712 |
| **White pine** | | | | | | | | |
| Sawtimber | 308,695 | -- | 647 | 251 | 5,608 | 1,165 | 4,957 | 2,205 |
| Poletimber | 51,886 | -- | -- | -- | -- | -- | 1,173 | -- |
| Sapling & seedling | 8,508 | -- | -- | -- | -- | 281 | 3,691 | -- |
| All stands | 369,089 | -- | 647 | 251 | 5,608 | 1,446 | 9,821 | 2,205 |
| **Balsam fir** | | | | | | | | |
| Sawtimber | 138,592 | -- | -- | -- | -- | 5,066 | 16,286 | 4,620 |
| Poletimber | 206,947 | -- | -- | 691 | -- | 1,199 | 6,688 | 12,266 |
| Sapling & seedling | 50,262 | 104 | 892 | 2,694 | 1,824 | 6,263 | 6,259 | 9,790 |
| All stands | 395,801 | 104 | 892 | 3,385 | 1,824 | 12,528 | 29,233 | 26,676 |
| **White spruce** | | | | | | | | |
| Sawtimber | 63,525 | -- | -- | -- | -- | -- | -- | 2,476 |
| Poletimber | 32,747 | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 1,977 | -- | -- | 373 | -- | 304 | 1,148 | -- |
| All stands | 98,249 | -- | -- | 373 | -- | 304 | 1,148 | 2,476 |
| **Black spruce** | | | | | | | | |
| Sawtimber | 6,226 | -- | 369 | -- | -- | -- | -- | 3,044 |
| Poletimber | 83,890 | -- | -- | 1,241 | -- | -- | 4,315 | 5,439 |
| Sapling & seedling | 34,384 | 175 | 495 | 3,824 | 970 | 7,272 | 2,591 | 3,965 |
| All stands | 124,500 | 175 | 864 | 5,065 | 970 | 7,272 | 6,906 | 12,448 |
| **Northern white-cedar** | | | | | | | | |
| Sawtimber | 178,435 | -- | -- | -- | -- | 2,702 | 304 | 2,045 |
| Poletimber | 264,608 | -- | -- | -- | -- | -- | 1,710 | -- |
| Sapling & seedling | 18,611 | -- | 30 | 1,346 | 234 | 2,122 | 1,441 | -- |
| All stands | 461,654 | -- | 30 | 1,346 | 234 | 4,824 | 3,455 | 2,045 |

(Table 37 continued on next page)

(Table 37 continued)

| Forest type and stand-size class | Basal-area class (square feet per acre) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| **Jack pine** | | | | | | | |
| Sawtimber | 11,916 | 18,771 | 11,468 | 27,741 | 11,068 | 4,426 | -- |
| Poletimber | 38,728 | 45,632 | 82,642 | 50,165 | 26,593 | 3,177 | 5,258 |
| Sapling & seedling | 21,874 | 1,573 | -- | -- | -- | -- | -- |
| All stands | 72,518 | 65,976 | 94,110 | 77,906 | 37,661 | 7,603 | 5,258 |
| **Red pine** | | | | | | | |
| Sawtimber | 8,525 | 14,173 | 17,245 | 89,447 | 80,202 | 71,431 | 21,050 |
| Poletimber | 10,254 | 27,530 | 11,567 | 67,808 | 86,656 | 54,744 | 126,852 |
| Sapling & seedling | 4,643 | 2,452 | 255 | 2,974 | 2,187 | -- | -- |
| All stands | 23,422 | 44,155 | 29,067 | 160,229 | 169,045 | 126,175 | 147,902 |
| **White pine** | | | | | | | |
| Sawtimber | 9,997 | 17,421 | 17,970 | 77,999 | 76,942 | 52,178 | 41,355 |
| Poletimber | 3,334 | 5,994 | 7,419 | 13,207 | 11,821 | 8,938 | -- |
| Sapling & seedling | 4,536 | -- | -- | -- | -- | -- | -- |
| All stands | 17,867 | 23,415 | 25,389 | 91,206 | 88,763 | 61,116 | 41,355 |
| **Balsam fir** | | | | | | | |
| Sawtimber | 8,210 | 9,201 | 9,276 | 26,607 | 42,830 | 6,338 | 10,158 |
| Poletimber | 6,062 | 17,207 | 6,624 | 31,792 | 62,143 | 37,198 | 25,077 |
| Sapling & seedling | 12,569 | 1,213 | 4,375 | 1,740 | 1,167 | 1,372 | -- |
| All stands | 26,841 | 27,621 | 20,275 | 60,139 | 106,140 | 44,908 | 35,235 |
| **White spruce** | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | 25,896 | 35,153 |
| Poletimber | -- | 2,821 | 2,564 | 2,265 | 17,955 | 7,142 | -- |
| Sapling & seedling | 152 | -- | -- | -- | -- | -- | -- |
| All stands | 152 | 2,821 | 2,564 | 2,265 | 17,955 | 33,038 | 35,153 |
| **Black spruce** | | | | | | | |
| Sawtimber | -- | -- | -- | -- | 2,813 | -- | -- |
| Poletimber | 8,187 | 6,282 | 28,293 | 9,141 | 18,540 | 2,452 | -- |
| Sapling & seedling | 6,760 | 4,253 | 1,510 | 1,559 | 1,010 | -- | -- |
| All stands | 14,947 | 10,535 | 29,803 | 10,700 | 22,363 | 2,452 | -- |
| **Northern white-cedar** | | | | | | | |
| Sawtimber | 6,093 | 7,745 | 2,748 | 10,415 | 38,652 | 41,289 | 66,442 |
| Poletimber | 5,648 | 7,226 | 2,407 | 43,757 | 33,008 | 86,650 | 84,202 |
| Sapling & seedling | 3,521 | 1,643 | -- | 4,967 | -- | 3,307 | -- |
| All stands | 15,262 | 16,614 | 5,155 | 59,139 | 71,660 | 131,246 | 150,644 |

(Table 37 continued on next page)

(Table 37 continued)

| Forest type and stand-size class | All classes | Basal-area class (square feet per acre) 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 |
|---|---|---|---|---|---|---|---|---|
| **Tamarack** | | | | | | | | |
| Sawtimber | 11,554 | -- | 380 | 2,138 | -- | 1,089 | 1,601 | 1,474 |
| Poletimber | 74,609 | -- | 251 | 882 | 1,199 | 6,066 | 6,103 | 10,767 |
| Sapling & seedling | 27,911 | 208 | 842 | 1,947 | 3,035 | 3,519 | 5,041 | 2,126 |
| All stands | 114,074 | 208 | 1,473 | 4,967 | 4,234 | 10,674 | 12,745 | 14,367 |
| **Oak-hickory** | | | | | | | | |
| Sawtimber | 1,884,950 | -- | 709 | 5,984 | 11,115 | 38,535 | 56,682 | 92,301 |
| Poletimber | 948,482 | -- | -- | 1,284 | 4,296 | 3,430 | 43,846 | 32,751 |
| Sapling & seedling | 143,070 | 596 | 3,997 | 17,290 | 17,328 | 25,598 | 30,571 | 14,795 |
| All stands | 2,976,502 | 596 | 4,706 | 24,558 | 32,739 | 67,563 | 131,099 | 139,847 |
| **Elm-ash-soft maple** | | | | | | | | |
| Sawtimber | 536,724 | -- | 1,074 | 5,550 | 8,180 | 11,736 | 29,135 | 13,574 |
| Poletimber | 529,509 | -- | 4,076 | 6,376 | 9,171 | 16,635 | 33,928 | 32,723 |
| Sapling & seedling | 94,748 | 460 | 4,448 | 8,781 | 11,440 | 15,897 | 18,144 | 9,263 |
| All stands | 1,160,981 | 460 | 9,598 | 20,707 | 28,791 | 44,268 | 81,207 | 55,560 |
| **Maple-birch** | | | | | | | | |
| Sawtimber | 2,455,682 | -- | -- | 3,771 | 3,763 | 26,240 | 45,955 | 48,658 |
| Poletimber | 2,308,839 | -- | -- | 2,880 | 6,296 | 21,902 | 52,785 | 63,171 |
| Sapling & seedling | 280,793 | 794 | 6,987 | 15,947 | 19,184 | 44,749 | 39,200 | 29,778 |
| All stands | 5,045,314 | 794 | 6,987 | 22,598 | 29,243 | 92,891 | 137,940 | 141,607 |
| **Aspen** | | | | | | | | |
| Sawtimber | 558,223 | -- | 627 | 4,018 | 5,854 | 12,171 | 25,762 | 23,457 |
| Poletimber | 1,904,283 | -- | 1,920 | 10,770 | 11,884 | 55,211 | 107,587 | 132,036 |
| Sapling & seedling | 379,622 | 3,000 | 17,288 | 36,736 | 43,725 | 71,166 | 57,608 | 38,872 |
| All stands | 2,842,128 | 3,000 | 19,835 | 51,524 | 61,463 | 138,548 | 190,957 | 194,365 |
| **Paper birch** | | | | | | | | |
| Sawtimber | 106,169 | -- | -- | 490 | -- | 2,737 | 2,929 | 11,234 |
| Poletimber | 560,851 | -- | -- | 680 | 4,058 | 10,103 | 25,372 | 10,922 |
| Sapling & seedling | 62,223 | 206 | 1,566 | 3,140 | 5,661 | 11,724 | 9,631 | 6,719 |
| All stands | 729,243 | 206 | 1,566 | 4,310 | 9,719 | 24,564 | 37,932 | 28,875 |
| **Exotic** | | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 556 | -- | -- | -- | -- | -- | -- | -- |
| All stands | 556 | -- | -- | -- | -- | -- | -- | -- |
| **Nonstocked** | 16,602 | 1,515 | 2,512 | 483 | 1,718 | 795 | 2,875 | 1,521 |
| **All types** | | | | | | | | |
| Sawtimber | 6,664,468 | -- | 3,806 | 22,202 | 39,877 | 105,305 | 193,304 | 214,404 |
| Poletimber | 7,648,635 | -- | 6,247 | 24,804 | 40,007 | 120,498 | 299,807 | 319,098 |
| Sapling & seedling | 1,168,480 | 5,779 | 37,513 | 94,381 | 108,854 | 193,923 | 185,070 | 121,432 |
| Nonstocked | 16,602 | 1,515 | 2,512 | 483 | 1,718 | 795 | 2,875 | 1,521 |
| All stands | 15,498,185 | 7,294 | 50,078 | 141,870 | 190,456 | 420,521 | 681,056 | 656,455 |

(Table 37 continued on next page)

(Table 37 continued)

| Forest type and stand-size class | Basal-area class (square feet per acre) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| **Tamarack** | | | | | | | |
| Sawtimber | -- | -- | -- | 4,872 | -- | -- | -- |
| Poletimber | 1,992 | 24,393 | 10,502 | 11,243 | 1,211 | -- | -- |
| Sapling & seedling | 6,902 | 890 | 3,401 | -- | -- | -- | -- |
| All stands | 8,894 | 25,283 | 13,903 | 16,115 | 1,211 | -- | -- |
| **Oak-hickory** | | | | | | | |
| Sawtimber | 157,183 | 221,750 | 160,402 | 515,996 | 455,742 | 146,359 | 22,192 |
| Poletimber | 83,354 | 124,183 | 112,925 | 227,997 | 205,484 | 97,266 | 11,666 |
| Sapling & seedling | 7,949 | 7,134 | 4,181 | 9,528 | 4,103 | -- | -- |
| All stands | 248,486 | 353,067 | 277,508 | 753,521 | 665,329 | 243,625 | 33,858 |
| **Elm-ash-soft maple** | | | | | | | |
| Sawtimber | 27,256 | 48,530 | 54,340 | 99,625 | 139,419 | 74,672 | 23,633 |
| Poletimber | 54,177 | 70,400 | 44,555 | 85,144 | 109,201 | 53,670 | 9,453 |
| Sapling & seedling | 8,449 | 6,575 | 5,971 | 2,314 | 3,006 | -- | -- |
| All stands | 89,882 | 125,505 | 104,866 | 187,083 | 251,626 | 128,342 | 33,086 |
| **Maple-birch** | | | | | | | |
| Sawtimber | 133,637 | 189,535 | 173,803 | 555,608 | 796,307 | 377,561 | 100,844 |
| Poletimber | 139,111 | 274,771 | 175,617 | 609,334 | 654,125 | 255,793 | 53,054 |
| Sapling & seedling | 35,381 | 29,778 | 11,303 | 35,612 | 7,030 | 5,050 | -- |
| All stands | 308,129 | 494,084 | 360,723 | 1,200,554 | 1,457,462 | 638,404 | 153,898 |
| **Aspen** | | | | | | | |
| Sawtimber | 36,648 | 62,777 | 43,964 | 105,352 | 171,344 | 38,545 | 27,704 |
| Poletimber | 162,104 | 250,419 | 187,834 | 371,517 | 434,289 | 142,357 | 36,355 |
| Sapling & seedling | 50,050 | 32,429 | 15,060 | 10,921 | 1,962 | 805 | -- |
| All stands | 248,802 | 345,625 | 246,858 | 487,790 | 607,595 | 181,707 | 64,059 |
| **Paper birch** | | | | | | | |
| Sawtimber | 7,736 | 12,170 | 3,826 | 21,773 | 21,811 | 12,648 | 8,815 |
| Poletimber | 36,857 | 36,956 | 36,472 | 111,265 | 195,760 | 82,634 | 9,772 |
| Sapling & seedling | 4,847 | 7,032 | 3,593 | 5,638 | 2,466 | -- | -- |
| All stands | 49,440 | 56,158 | 43,891 | 138,676 | 220,037 | 95,282 | 18,587 |
| **Exotic** | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 556 | -- | -- | -- | -- | -- | -- |
| All stands | 556 | -- | -- | -- | -- | -- | -- |
| **Nonstocked** | 1,463 | -- | 2,217 | 589 | 914 | -- | -- |
| **All types** | | | | | | | |
| Sawtimber | 407,201 | 602,073 | 495,042 | 1,535,435 | 1,837,130 | 851,343 | 357,346 |
| Poletimber | 549,808 | 893,814 | 709,421 | 1,634,635 | 1,856,786 | 832,021 | 361,689 |
| Sapling & seedling | 168,189 | 94,972 | 49,649 | 75,253 | 22,931 | 10,534 | -- |
| Nonstocked | 1,463 | -- | 2,217 | 589 | 914 | -- | -- |
| All stands | 1,126,661 | 1,590,859 | 1,256,329 | 3,245,912 | 3,717,761 | 1,693,898 | 719,035 |

### Table 38.--Net volume of sawtimber on commercial forest land by forest type, stand-size class, and basal-area class, Wisconsin, 1983

(In thousand board feet)[1/]

| Forest type and stand-size class | All classes | Basal-area class (square feet per acre) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 |
| Jack pine | | | | | | | | |
| Sawtimber | 387,722 | -- | -- | -- | 14,374 | 6,106 | 33,252 | 30,262 |
| Poletimber | 367,992 | -- | -- | -- | 1,933 | 6,512 | 15,316 | 23,266 |
| Sapling & seedling | 53,541 | -- | 1,677 | 1,419 | 4,983 | 12,680 | 4,940 | 11,292 |
| All stands | 809,255 | -- | 1,677 | 1,419 | 21,290 | 25,298 | 53,508 | 64,820 |
| Red pine | | | | | | | | |
| Sawtimber | 1,247,341 | -- | -- | -- | 6,709 | 10,381 | 8,288 | -- |
| Poletimber | 257,108 | -- | -- | -- | -- | 796 | 4,906 | 5,614 |
| Sapling & seedling | 49,545 | 790 | 702 | -- | 9,183 | 7,614 | 9,425 | -- |
| All stands | 1,553,994 | 790 | 702 | -- | 15,892 | 18,791 | 22,619 | 5,614 |
| White pine | | | | | | | | |
| Sawtimber | 1,329,387 | -- | 3,600 | 1,198 | 30,725 | 6,433 | 24,229 | 9,210 |
| Poletimber | 86,177 | -- | -- | -- | -- | -- | 2,120 | -- |
| Sapling & seedling | 28,509 | -- | -- | -- | -- | -- | 16,102 | -- |
| All stands | 1,444,073 | -- | 3,600 | 1,198 | 30,725 | 6,433 | 42,451 | 9,210 |
| Balsam fir | | | | | | | | |
| Sawtimber | 431,236 | -- | -- | -- | -- | 14,233 | 62,424 | 13,586 |
| Poletimber | 308,334 | -- | -- | 1,114 | -- | 2,572 | 13,103 | 9,473 |
| Sapling & seedling | 82,878 | 549 | 1,973 | 6,862 | 4,877 | 18,506 | 6,640 | 7,147 |
| All stands | 822,448 | 549 | 1,973 | 7,976 | 4,877 | 35,311 | 82,167 | 30,206 |
| White spruce | | | | | | | | |
| Sawtimber | 177,558 | -- | -- | -- | -- | -- | -- | 7,211 |
| Poletimber | 36,803 | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 4,960 | -- | -- | -- | -- | 1,494 | 3,466 | -- |
| All stands | 219,321 | -- | -- | -- | -- | 1,494 | 3,466 | 7,211 |
| Black spruce | | | | | | | | |
| Sawtimber | 19,485 | -- | 1,204 | -- | -- | -- | -- | 10,281 |
| Poletimber | 145,900 | -- | -- | 525 | -- | -- | 4,544 | 5,092 |
| Sapling & seedling | 35,072 | -- | -- | 2,504 | -- | 11,410 | 3,002 | 503 |
| All stands | 200,457 | -- | 1,204 | 3,029 | -- | 11,410 | 7,546 | 15,876 |
| Northern white-cedar | | | | | | | | |
| Sawtimber | 557,326 | -- | -- | -- | -- | 11,897 | 1,077 | 8,423 |
| Poletimber | 297,205 | -- | -- | -- | -- | -- | 899 | -- |
| Sapling & seedling | 19,213 | -- | -- | 2,150 | 417 | 5,210 | 1,621 | -- |
| All stands | 873,744 | -- | -- | 2,150 | 417 | 17,107 | 3,597 | 8,423 |

(Table 38 continued on next page)

(Table 38 continued)

| Forest type and stand-size class | Basal-area class (square feet per acre) 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
|---|---|---|---|---|---|---|---|
| Jack pine | | | | | | | |
| Sawtimber | 45,035 | 63,635 | 41,183 | 99,732 | 39,437 | 14,706 | -- |
| Poletimber | 41,783 | 60,533 | 105,048 | 81,147 | 28,219 | -- | 4,235 |
| Sapling & seedling | 15,341 | 1,209 | -- | -- | -- | -- | -- |
| All stands | 102,159 | 125,377 | 146,231 | 180,879 | 67,656 | 14,706 | 4,235 |
| Red pine | | | | | | | |
| Sawtimber | 32,779 | 58,160 | 68,536 | 367,996 | 345,970 | 266,237 | 82,285 |
| Poletimber | 2,133 | 29,081 | 5,129 | 49,865 | 66,062 | 35,075 | 58,447 |
| Sapling & seedling | 4,792 | 7,269 | -- | 7,872 | 1,898 | -- | -- |
| All stands | 39,704 | 94,510 | 73,665 | 425,733 | 413,930 | 301,312 | 140,732 |
| White pine | | | | | | | |
| Sawtimber | 49,576 | 71,666 | 67,142 | 324,999 | 307,876 | 224,685 | 208,048 |
| Poletimber | 6,021 | 11,153 | 8,200 | 15,385 | 33,842 | 9,456 | -- |
| Sapling & seedling | 12,407 | -- | -- | -- | -- | -- | -- |
| All stands | 68,004 | 82,819 | 75,342 | 340,384 | 341,718 | 234,141 | 208,048 |
| Balsam fir | | | | | | | |
| Sawtimber | 30,992 | 30,773 | 28,625 | 79,046 | 126,374 | 18,028 | 27,155 |
| Poletimber | 9,342 | 27,345 | 8,360 | 43,262 | 113,858 | 50,250 | 29,655 |
| Sapling & seedling | 19,234 | 2,830 | 5,485 | 4,054 | 1,202 | 3,519 | -- |
| All stands | 59,568 | 60,948 | 42,470 | 126,362 | 241,434 | 71,797 | 56,810 |
| White spruce | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | 71,875 | 98,472 |
| Poletimber | -- | 5,385 | 2,579 | 3,330 | 13,869 | 11,640 | -- |
| Sapling & seedling | -- | -- | -- | -- | -- | -- | -- |
| All stands | -- | 5,385 | 2,579 | 3,330 | 13,869 | 83,515 | 98,472 |
| Black spruce | | | | | | | |
| Sawtimber | -- | -- | -- | -- | 8,000 | -- | -- |
| Poletimber | 8,923 | 6,419 | 81,671 | 10,665 | 28,061 | -- | -- |
| Sapling & seedling | 7,786 | 9,867 | -- | -- | -- | -- | -- |
| All stands | 16,709 | 16,286 | 81,671 | 10,665 | 36,061 | -- | -- |
| Northern white-cedar | | | | | | | |
| Sawtimber | 23,350 | 21,553 | 11,505 | 29,866 | 122,098 | 137,097 | 190,460 |
| Poletimber | 7,896 | 9,028 | 4,530 | 67,892 | 24,754 | 110,682 | 71,524 |
| Sapling & seedling | 1,315 | 3,229 | -- | 3,298 | -- | 1,973 | -- |
| All stands | 32,561 | 33,810 | 16,035 | 101,056 | 146,852 | 249,752 | 261,984 |

(Table 38 continued on next page)

(Table 38 continued)

| Forest type and stand-size class | All classes | Basal-area class (square feet per acre) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 |
| Tamarack | | | | | | | | |
| Sawtimber | 38,022 | -- | 1,439 | 8,099 | -- | 4,586 | 4,413 | 4,509 |
| Poletimber | 58,373 | -- | 1,397 | 878 | -- | 2,204 | 4,578 | 5,684 |
| Sapling & seedling | 28,330 | 766 | 846 | 1,557 | 4,879 | 5,096 | 3,732 | 2,320 |
| All stands | 124,725 | 766 | 3,682 | 10,534 | 4,879 | 11,886 | 12,723 | 12,513 |
| Oak-hickory | | | | | | | | |
| Sawtimber | 6,918,200 | -- | 3,524 | 30,406 | 50,587 | 168,214 | 246,769 | 364,835 |
| Poletimber | 1,312,489 | -- | -- | 1,701 | 8,294 | 4,001 | 68,564 | 54,505 |
| Sapling & seedling | 351,917 | 966 | 9,499 | 43,729 | 48,577 | 47,233 | 78,755 | 39,412 |
| All stands | 8,582,606 | 966 | 13,023 | 75,836 | 107,458 | 219,448 | 394,088 | 458,752 |
| Elm-ash-soft maple | | | | | | | | |
| Sawtimber | 1,819,357 | -- | 4,816 | 24,116 | 29,904 | 47,110 | 110,654 | 54,561 |
| Poletimber | 739,519 | -- | 675 | 8,157 | 17,946 | 21,573 | 49,311 | 43,250 |
| Sapling & seedling | 168,950 | 547 | 11,576 | 23,447 | 21,359 | 24,844 | 28,512 | 13,177 |
| All stands | 2,727,826 | 547 | 17,067 | 55,720 | 69,209 | 93,527 | 188,477 | 110,988 |
| Maple-birch | | | | | | | | |
| Sawtimber | 8,596,273 | -- | -- | 14,290 | 15,429 | 103,271 | 151,095 | 185,941 |
| Poletimber | 3,367,547 | -- | -- | 2,183 | 10,549 | 32,527 | 60,191 | 88,949 |
| Sapling & seedling | 584,440 | 2,505 | 17,554 | 36,848 | 49,431 | 123,568 | 74,425 | 45,273 |
| All stands | 12,548,260 | 2,505 | 17,554 | 53,321 | 75,409 | 259,366 | 285,711 | 320,163 |
| Aspen | | | | | | | | |
| Sawtimber | 1,632,601 | -- | 2,559 | 14,061 | 19,218 | 38,396 | 82,959 | 75,286 |
| Poletimber | 1,929,362 | -- | 2,015 | 11,413 | 10,245 | 70,409 | 87,446 | 114,285 |
| Sapling & seedling | 484,944 | 8,507 | 46,276 | 68,238 | 46,410 | 71,353 | 71,525 | 55,540 |
| All stands | 4,046,907 | 8,507 | 50,850 | 93,712 | 75,873 | 180,158 | 241,930 | 245,111 |
| Paper birch | | | | | | | | |
| Sawtimber | 332,872 | -- | -- | 1,855 | -- | 7,769 | 9,855 | 41,691 |
| Poletimber | 654,524 | -- | -- | -- | 2,808 | 12,300 | 10,232 | 14,836 |
| Sapling & seedling | 63,887 | 1,176 | 2,597 | 5,490 | 3,409 | 8,412 | 14,263 | 11,963 |
| All stands | 1,051,283 | 1,176 | 2,597 | 7,345 | 6,217 | 28,481 | 34,350 | 68,490 |
| Exotic | | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | -- | -- | -- | -- | -- | -- | -- | -- |
| All stands | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 30,514 | 5,086 | 4,634 | 2,135 | 2,440 | 750 | 5,274 | 4,075 |
| All types | | | | | | | | |
| Sawtimber | 23,487,380 | -- | 17,142 | 94,025 | 166,946 | 418,396 | 735,015 | 805,796 |
| Poletimber | 9,561,333 | -- | 4,087 | 25,971 | 51,775 | 152,894 | 321,210 | 364,954 |
| Sapling & seedling | 1,956,186 | 15,806 | 92,700 | 192,244 | 193,525 | 337,420 | 316,408 | 186,627 |
| Nonstocked | 30,514 | 5,086 | 4,634 | 2,135 | 2,440 | 750 | 5,274 | 4,075 |
| All stands | 35,035,413 | 20,892 | 118,563 | 314,375 | 414,686 | 909,460 | 1,377,907 | 1,361,452 |

(Table 38 continued on next page)

(Table 38 continued)

| Forest type and stand-size class | Basal-area class (square feet per acre) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| **Tamarack** | | | | | | | |
| Sawtimber | -- | -- | -- | 14,976 | -- | -- | -- |
| Poletimber | 3,719 | 22,000 | 8,378 | 8,180 | 1,355 | -- | -- |
| Sapling & seedling | 4,340 | 2,187 | 2,607 | -- | -- | -- | -- |
| All stands | 8,059 | 24,187 | 10,985 | 23,156 | 1,355 | -- | -- |
| **Oak-hickory** | | | | | | | |
| Sawtimber | 588,208 | 831,157 | 609,591 | 1,852,013 | 1,562,289 | 543,475 | 67,132 |
| Poletimber | 109,998 | 163,993 | 173,335 | 314,428 | 287,636 | 108,037 | 17,997 |
| Sapling & seedling | 10,896 | 16,460 | 10,631 | 34,549 | 11,210 | -- | -- |
| All stands | 709,102 | 1,011,610 | 793,557 | 2,200,990 | 1,861,135 | 651,512 | 85,129 |
| **Elm-ash-soft maple** | | | | | | | |
| Sawtimber | 98,151 | 153,418 | 196,526 | 343,795 | 474,541 | 213,387 | 68,378 |
| Poletimber | 78,768 | 105,692 | 58,355 | 126,717 | 138,540 | 77,812 | 12,723 |
| Sapling & seedling | 5,154 | 11,588 | 10,081 | 9,552 | 9,113 | -- | -- |
| All stands | 182,073 | 270,698 | 264,962 | 480,064 | 622,194 | 291,199 | 81,101 |
| **Maple-birch** | | | | | | | |
| Sawtimber | 484,462 | 718,435 | 625,015 | 2,006,890 | 2,683,521 | 1,271,520 | 336,404 |
| Poletimber | 193,938 | 407,450 | 266,194 | 878,847 | 1,007,142 | 348,193 | 71,384 |
| Sapling & seedling | 51,354 | 71,952 | 23,620 | 67,987 | 10,646 | 9,277 | -- |
| All stands | 729,754 | 1,197,837 | 914,829 | 2,953,724 | 3,701,309 | 1,628,990 | 407,788 |
| **Aspen** | | | | | | | |
| Sawtimber | 118,489 | 205,001 | 127,443 | 293,175 | 495,901 | 91,552 | 68,561 |
| Poletimber | 174,061 | 281,542 | 192,732 | 387,061 | 445,634 | 122,929 | 29,590 |
| Sapling & seedling | 59,567 | 22,987 | 18,053 | 15,392 | 1,096 | -- | -- |
| All stands | 352,117 | 509,530 | 338,228 | 695,628 | 942,631 | 214,481 | 98,151 |
| **Paper birch** | | | | | | | |
| Sawtimber | 23,844 | 37,335 | 9,318 | 67,684 | 61,028 | 43,927 | 28,566 |
| Poletimber | 48,473 | 46,924 | 42,394 | 130,581 | 230,731 | 104,593 | 10,652 |
| Sapling & seedling | 1,637 | 8,665 | 613 | 5,662 | -- | -- | -- |
| All stands | 73,954 | 92,924 | 52,325 | 203,927 | 291,759 | 148,520 | 39,218 |
| **Exotic** | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | -- | -- | -- | -- | -- | -- | -- |
| All stands | -- | -- | -- | -- | -- | -- | -- |
| **Nonstocked** | 3,439 | -- | 2,681 | -- | -- | -- | -- |
| **All types** | | | | | | | |
| Sawtimber | 1,494,886 | 2,191,133 | 1,784,884 | 5,480,172 | 6,227,035 | 2,896,489 | 1,175,461 |
| Poletimber | 685,055 | 1,176,545 | 956,905 | 2,117,360 | 2,419,703 | 978,667 | 306,207 |
| Sapling & seedling | 193,823 | 158,243 | 71,090 | 148,366 | 35,165 | 14,769 | -- |
| Nonstocked | 3.439 | -- | 2,681 | -- | -- | -- | -- |
| All stands | 2,377,203 | 3,525,921 | 2,815,560 | 7,745,898 | 8,681,903 | 3,889,925 | 1,481,668 |

Table 39.--Net volume of sawtimber on commercial forest land by species group, log grade, and diameter class, Wisconsin, 1983

(In thousand board feet)[1]

| | All grades | | | | | Log grade 1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Species group | Total | 9.0-14.9 | 15.0-18.9 | 19.0-22.9 | 23.0+ | Total | 9.0-14.9 | 15.0-18.9 | 19.0-22.9 | 23.0+ |
| Softwoods | | | | | | | | | | |
| Jack pine | 1,069,425 | 1,041,191 | 27,309 | 925 | -- | 3,780 | 3,780 | -- | -- | -- |
| Red pine | 1,997,086 | 1,340,116 | 433,658 | 187,608 | 35,704 | 64,843 | 12,219 | 39,906 | 12,718 | -- |
| White pine | 2,666,253 | 783,469 | 743,711 | 566,428 | 572,645 | 205,803 | 2,592 | 32,067 | 85,893 | 85,251 |
| White spruce | 606,863 | 465,746 | 107,194 | 25,295 | 8,628 | 4,476 | -- | 4,476 | -- | -- |
| Black spruce | 101,796 | 95,070 | 6,726 | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | 1,031,536 | 943,798 | 86,664 | 1,074 | -- | -- | -- | -- | -- | -- |
| Hemlock | 1,130,685 | 452,852 | 349,424 | 192,081 | 136,328 | 74,073 | -- | 14,509 | 34,367 | 25,197 |
| Tamarack | 193,864 | 178,221 | 13,785 | 1,858 | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | 4,843 | 3,109 | 1,734 | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 1,118,865 | 973,457 | 122,875 | 18,901 | 3,632 | 4,557 | -- | 2,020 | 2,537 | -- |
| Other softwoods | 7,630 | 5,958 | 1,672 | -- | -- | -- | -- | -- | -- | -- |
| Total | 9,928,846 | 6,282,987 | 1,894,752 | 994,170 | 756,937 | 357,532 | 18,591 | 92,978 | 135,515 | 110,448 |
| Hardwoods | | | | | | | | | | |
| White oak | 2,230,778 | 1,012,001 | 657,378 | 331,263 | 230,136 | 56,890 | -- | 16,636 | 30,047 | 10,207 |
| Select red oak | 4,555,263 | 1,912,753 | 1,361,552 | 729,244 | 551,714 | 418,422 | -- | 160,285 | 112,794 | 145,343 |
| Other red oak | 1,817,970 | 873,490 | 561,446 | 236,715 | 146,319 | 18,558 | -- | 16,478 | 2,080 | -- |
| Select hickory | 272,089 | 194,200 | 62,182 | 12,938 | 2,769 | -- | -- | -- | -- | -- |
| Other hickory | 86,411 | 72,661 | 11,355 | 1,207 | 1,188 | -- | -- | -- | -- | -- |
| Basswood | 1,991,915 | 1,171,104 | 486,895 | 200,098 | 133,818 | 265,516 | 25,736 | 144,539 | 61,658 | 33,583 |
| Beech | 117,188 | 44,889 | 39,423 | 22,045 | 10,831 | 1,455 | -- | -- | -- | 1,455 |
| Yellow birch | 561,730 | 240,829 | 198,844 | 77,766 | 44,291 | 61,055 | -- | 22,734 | 21,033 | 17,288 |
| Hard maple | 3,384,420 | 1,461,876 | 1,027,583 | 539,247 | 355,714 | 319,532 | -- | 137,234 | 106,482 | 75,816 |
| Soft maple | 1,859,236 | 1,123,886 | 431,551 | 171,553 | 132,246 | 114,351 | -- | 51,794 | 17,176 | 45,381 |
| Elm | 1,182,708 | 580,563 | 356,184 | 128,054 | 117,907 | 101,281 | -- | 58,369 | 10,486 | 32,426 |
| Black ash | 549,728 | 425,412 | 104,519 | 16,731 | 3,066 | 33,875 | 6,224 | 26,669 | -- | 982 |
| White & green ash | 813,179 | 535,758 | 200,316 | 42,740 | 34,365 | 64,812 | 16,073 | 17,226 | 16,093 | 15,420 |
| Cottonwood | 130,777 | 42,787 | 18,279 | 18,532 | 51,179 | 16,835 | -- | 2,384 | 5,091 | 9,360 |
| Willow | 84,501 | 26,091 | 35,513 | 12,268 | 10,629 | -- | -- | -- | -- | -- |
| Hackberry | 8,473 | 6,641 | -- | -- | 1,832 | -- | -- | -- | -- | -- |
| Balsam poplar | 99,922 | 61,442 | 21,861 | 14,850 | 1,769 | 7,315 | -- | 3,458 | 3,857 | -- |
| Bigtooth aspen | 1,385,402 | 1,085,357 | 271,267 | 24,726 | 4,052 | 10,932 | -- | 7,735 | 3,197 | -- |
| Quaking aspen | 2,655,293 | 2,198,720 | 424,171 | 30,610 | 1,792 | 26,055 | -- | 21,985 | 4,070 | -- |
| Paper birch | 791,454 | 699,478 | 86,023 | 5,182 | 771 | 5,271 | -- | 5,271 | -- | -- |
| River birch | 19,495 | 9,433 | 4,088 | 4,914 | 1,060 | -- | -- | -- | -- | -- |
| Black cherry | 262,572 | 199,789 | 48,103 | 10,594 | 4,086 | 4,925 | -- | 4,925 | -- | -- |
| Black walnut | 84,770 | 55,062 | 21,598 | 6,905 | 1,205 | -- | -- | -- | -- | -- |
| Butternut | 123,867 | 74,586 | 38,848 | 6,431 | 4,002 | -- | -- | -- | -- | -- |
| Other hardwoods | 37,426 | 29,858 | 3,796 | 3,772 | -- | -- | -- | -- | -- | -- |
| Total | 25,106,567 | 14,138,666 | 6,472,775 | 2,648,385 | 1,846,741 | 1,527,080 | 48,033 | 697,722 | 394,064 | 387,261 |
| All species | 35,035,413 | 20,421,653 | 8,367,527 | 3,642,555 | 2,603,678 | 1,884,612 | 66,624 | 790,700 | 529,579 | 497,709 |

(Table 39 continued on next page)

[1] International 1/4-inch rule.

(Table 39 continued)

| | Log grade 2 | | | | | Log grades 3 & 4 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Species group | Total | 9.0-14.9 | 15.0-18.9 | 19.0-22.9 | 23.0+ | Total | 9.0-14.9 | 15.0-18.9 | 19.0-22.9 | 23.0+ |
| Softwoods | | | | | | | | | | |
| Jack pine | 27,146 | 26,906 | 240 | -- | -- | 1,038,499 | 1,010,505 | 27,069 | 925 | -- |
| Red pine | 95,068 | 30,674 | 30,432 | 26,670 | 7,292 | 1,837,175 | 1,297,223 | 363,320 | 148,220 | 28,412 |
| White pine | 454,000 | 106,799 | 138,165 | 89,994 | 119,042 | 2,006,450 | 674,078 | 573,479 | 390,541 | 368,352 |
| White spruce | 12,653 | 1,829 | 10,082 | -- | 742 | 589,734 | 463,917 | 92,636 | 25,295 | 7,886 |
| Black spruce | 324 | 166 | 158 | -- | -- | 101,472 | 94,904 | 6,568 | -- | -- |
| Balsam fir | 6,663 | 2,820 | 3,843 | -- | -- | 1,024,873 | 940,978 | 82,821 | 1,074 | -- |
| Hemlock | 147,258 | 32,254 | 52,597 | 33,219 | 29,188 | 909,354 | 420,598 | 282,318 | 124,495 | 81,943 |
| Tamarack | 367 | 367 | -- | -- | -- | 193,497 | 177,854 | 13,785 | 1,858 | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | 4,843 | 3,109 | 1,734 | -- | -- |
| Northern white-cedar | 28,145 | 15,773 | 12,178 | 194 | -- | 1,086,163 | 957,684 | 108,677 | 16,170 | 3,632 |
| Other softwoods | -- | -- | -- | -- | -- | 7,630 | 5,958 | 1,672 | -- | -- |
| Total | 771,624 | 217,588 | 247,695 | 150,077 | 156,264 | 8,799,690 | 6,046,808 | 1,554,079 | 708,578 | 490,225 |
| Hardwoods | | | | | | | | | | |
| White oak | 459,433 | 131,142 | 190,242 | 74,504 | 63,545 | 1,714,455 | 880,859 | 450,500 | 226,712 | 156,384 |
| Select red oak | 930,702 | 237,784 | 351,348 | 192,929 | 148,641 | 3,206,139 | 1,674,969 | 849,919 | 423,521 | 257,730 |
| Other red oak | 267,435 | 56,245 | 98,616 | 34,786 | 77,788 | 1,531,977 | 817,245 | 446,352 | 199,849 | 68,531 |
| Select hickory | 40,050 | 28,234 | 11,593 | 137 | 86 | 232,039 | 165,966 | 50,589 | 12,801 | 2,683 |
| Other hickory | 6,124 | 5,472 | 547 | -- | 105 | 80,287 | 67,189 | 10,808 | 1,207 | 1,083 |
| Basswood | 397,020 | 179,012 | 137,361 | 53,441 | 27,206 | 1,329,379 | 966,356 | 204,995 | 84,999 | 73,029 |
| Beech | 27,351 | 706 | 10,597 | 12,356 | 3,692 | 88,382 | 44,183 | 28,826 | 9,689 | 5,684 |
| Yellow birch | 130,303 | 30,683 | 69,121 | 18,754 | 11,745 | 370,372 | 210,146 | 106,989 | 37,979 | 15,258 |
| Hard maple | 745,211 | 176,671 | 318,442 | 177,681 | 72,417 | 2,319,677 | 1,285,205 | 571,907 | 255,084 | 207,481 |
| Soft maple | 292,513 | 93,621 | 141,297 | 31,898 | 25,697 | 1,452,372 | 1,030,265 | 238,460 | 122,479 | 61,168 |
| Elm | 295,671 | 70,766 | 130,212 | 62,817 | 31,876 | 785,756 | 509,797 | 167,603 | 54,751 | 53,605 |
| Black ash | 97,159 | 67,210 | 24,729 | 5,033 | 187 | 418,694 | 351,978 | 53,121 | 11,698 | 1,897 |
| White & green ash | 153,200 | 76,731 | 65,963 | 7,280 | 3,226 | 595,167 | 442,954 | 117,127 | 19,367 | 15,719 |
| Cottonwood | 10,986 | 684 | 4,211 | 2,438 | 3,653 | 102,956 | 42,103 | 11,684 | 11,003 | 38,166 |
| Willow | 12,566 | 55 | 1,860 | 8,044 | 2,607 | 71,935 | 26,036 | 33,653 | 4,224 | 8,022 |
| Hackberry | 162 | -- | -- | -- | 162 | 8,311 | 6,641 | -- | -- | 1,670 |
| Balsam poplar | 22,301 | 12,218 | 6,633 | 3,450 | -- | 70,306 | 49,224 | 11,770 | 7,543 | 1,769 |
| Bigtooth aspen | 158,992 | 74,943 | 82,210 | 1,839 | -- | 1,215,478 | 1,010,414 | 181,322 | 19,690 | 4,052 |
| Quaking aspen | 222,059 | 128,902 | 90,495 | 2,662 | -- | 2,407,179 | 2,069,818 | 311,691 | 23,878 | 1,792 |
| Paper birch | 74,531 | 44,773 | 29,758 | -- | -- | 711,652 | 654,705 | 50,994 | 5,182 | 771 |
| River birch | 43 | 43 | -- | -- | -- | 19,452 | 9,390 | 4,088 | 4,914 | 1,060 |
| Black cherry | 40,951 | 27,365 | 9,500 | -- | 4,086 | 216,696 | 172,424 | 33,678 | 10,594 | -- |
| Black walnut | -- | -- | -- | -- | -- | 84,770 | 55,062 | 21,598 | 6,905 | 1,205 |
| Butternut | 30,433 | 13,240 | 17,193 | -- | -- | 93,434 | 61,346 | 21,655 | 6,431 | 4,002 |
| Other hardwoods | 5,106 | 3,916 | -- | 1,190 | -- | 32,320 | 25,942 | 3,796 | 2,582 | -- |
| Total | 4,420,302 | 1,460,416 | 1,791,928 | 691,239 | 476,719 | 19,159,185 | 12,630,217 | 3,983,125 | 1,563,082 | 982,761 |
| All species | 5,191,926 | 1,678,004 | 2,039,623 | 841,316 | 632,983 | 27,958,875 | 18,677,025 | 5,537,204 | 2,271,660 | 1,472,986 |

Table 40.--Net volume of short-log trees on commercial forest land by species group and diameter class, Wisconsin, 1983

(In thousand cubic feet)

| Species group | All classes | Diameter class (inches at breast height) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 9.0 10.9 | 11.0- 12.9 | 13.0- 14.9 | 15.0- 16.9 | 17.0- 18.9 | 19.0- 20.9 | 21.0- 22.9 | 23.0- 28.9 | 29.0- 38.9 | 39.0+ |
| Softwoods | | | | | | | | | | | |
| Jack pine | 6,579 | 2,366 | 1,398 | 2,702 | 113 | -- | -- | -- | -- | -- | -- |
| Red pine | 380 | 208 | -- | -- | -- | 172 | -- | -- | -- | -- | -- |
| White pine | 11,024 | 2,077 | 1,881 | 1,108 | 377 | 1,136 | 721 | 906 | 1,937 | 881 | -- |
| White spruce | 559 | -- | 559 | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | 192 | 192 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | 1,381 | 664 | 152 | 267 | 298 | -- | -- | -- | -- | -- | -- |
| Hemlock | 6,026 | 752 | 975 | 1,347 | 795 | 873 | 953 | -- | 189 | 142 | -- |
| Tamarack | 620 | -- | 222 | 398 | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 7,677 | 2,670 | 3,326 | 842 | 622 | 217 | -- | -- | -- | -- | -- |
| Other softwoods | 364 | 364 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 34,802 | 9,293 | 8,513 | 6,664 | 2,205 | 2,398 | 1,674 | 906 | 2,126 | 1,023 | -- |
| Hardwoods | | | | | | | | | | | |
| White oak | 65,306 | -- | 7,154 | 14,606 | 11,879 | 7,994 | 5,661 | 6,790 | 7,911 | 2,745 | 566 |
| Select red oak | 58,301 | -- | 3,066 | 11,502 | 11,285 | 6,586 | 6,304 | 6,518 | 8,738 | 4,302 | -- |
| Other red oak | 67,482 | -- | 6,350 | 13,935 | 15,690 | 11,717 | 6,269 | 4,776 | 7,802 | 783 | 160 |
| Select hickory | 4,065 | -- | 867 | 1,022 | 1,818 | 358 | -- | -- | -- | -- | -- |
| Other hickory | 1,319 | -- | 1,068 | 251 | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 16,376 | -- | 1,782 | 3,461 | 2,916 | 2,213 | 2,169 | 1,118 | 1,277 | 411 | 1,029 |
| Beech | 1,674 | -- | -- | -- | 516 | 372 | -- | 163 | 207 | 416 | -- |
| Yellow birch | 11,098 | -- | 2,216 | 2,608 | 2,111 | 1,705 | 610 | 484 | 1,263 | 101 | -- |
| Hard maple | 47,409 | -- | 5,773 | 10,329 | 8,977 | 7,525 | 4,266 | 3,583 | 4,294 | 2,662 | -- |
| Soft maple | 34,851 | -- | 4,666 | 6,279 | 5,901 | 4,896 | 3,179 | 2,772 | 3,415 | 2,280 | 1,463 |
| Elm | 23,935 | -- | 3,432 | 4,859 | 5,725 | 2,407 | 2,325 | 1,249 | 2,145 | 1,793 | -- |
| Black ash | 1,962 | -- | 723 | 541 | 698 | -- | -- | -- | -- | -- | -- |
| White & green ash | 7,067 | -- | 1,230 | 1,481 | 1,196 | 953 | 233 | -- | 1,974 | -- | -- |
| Cottonwood | 1,311 | -- | 156 | 233 | -- | -- | 188 | -- | 473 | -- | 261 |
| Willow | 2,891 | -- | 194 | 379 | 545 | 202 | 211 | 416 | 683 | 261 | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 327 | -- | -- | -- | -- | 327 | -- | -- | -- | -- | -- |
| Bigtooth aspen | 7,574 | -- | 2,065 | 2,965 | 1,029 | 1,294 | 221 | -- | -- | -- | -- |
| Quaking aspen | 11,740 | -- | 5,192 | 5,113 | 1,096 | 229 | 110 | -- | -- | -- | -- |
| Paper birch | 8,418 | -- | 3,578 | 3,175 | 1,151 | -- | 403 | 111 | -- | -- | -- |
| River birch | 645 | -- | -- | -- | 365 | -- | 280 | -- | -- | -- | -- |
| Black cherry | 6,276 | -- | 393 | 2,650 | 1,955 | 138 | 211 | 467 | 462 | -- | -- |
| Black walnut | 798 | -- | 200 | -- | -- | 278 | 320 | -- | -- | -- | -- |
| Butternut | 2,758 | -- | 544 | 616 | 1,183 | 202 | -- | -- | 213 | -- | -- |
| Other hardwoods | 2,787 | -- | 732 | 768 | 590 | 402 | -- | -- | 138 | 157 | -- |
| Total | 386,370 | -- | 51,381 | 86,773 | 76,626 | 49,798 | 32,960 | 28,447 | 40,995 | 15,911 | 3,479 |
| All species | 421,172 | 9,293 | 59,894 | 93,437 | 78,831 | 52,196 | 34,634 | 29,353 | 43,121 | 16,934 | 3,479 |

Table 41.--Net volume of short-log trees on commercial forest land by species group and diameter class, Wisconsin, 1983

(In thousand board feet)[1]

| Species group | All classes | Diameter class (inches at breast height) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 9.0 10.9 | 11.0- 12.9 | 13.0- 14.9 | 15.0- 16.9 | 17.0- 18.9 | 19.0- 20.9 | 21.0- 22.9 | 23.0- 28.9 | 29.0- 38.9 | 39.0+ |
| Softwoods | | | | | | | | | | | |
| Jack pine | 22,799 | 8,247 | 4,824 | 9,333 | 395 | -- | -- | -- | -- | -- | -- |
| Red pine | 1,562 | 870 | -- | -- | -- | 692 | -- | -- | -- | -- | -- |
| White pine | 37,451 | 5,440 | 5,725 | 3,627 | 1,330 | 4,111 | 2,690 | 3,433 | 7,545 | 3,550 | -- |
| White spruce | 2,475 | -- | 2,475 | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | 494 | 494 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | 3,581 | 1,536 | 402 | 752 | 891 | -- | -- | -- | -- | -- | -- |
| Hemlock | 14,712 | 1,462 | 2,209 | 3.273 | 2,011 | 2,287 | 2,547 | -- | 521 | 402 | -- |
| Tamarack | 2,689 | -- | 949 | 1,740 | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 26,332 | 8,764 | 11,515 | 2,987 | 2,256 | 810 | -- | -- | -- | -- | -- |
| Other softwoods | 1,820 | 1,820 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 113,915 | 28,633 | 28,099 | 21,712 | 6,883 | 7,900 | 5,237 | 3,433 | 8,066 | 3,952 | -- |
| Hardwoods | | | | | | | | | | | |
| White oak | 171,428 | -- | 20,570 | 39,369 | 31,174 | 20,426 | 14,323 | 17,140 | 20,030 | 6,936 | 1,460 |
| Select red oak | 131,261 | -- | 6,730 | 25,331 | 25,074 | 14,693 | 14,203 | 14,854 | 20,220 | 10,156 | -- |
| Other red oak | 153,963 | -- | 14,384 | 31,486 | 35,468 | 26,621 | 14,379 | 11,059 | 18,291 | 1,878 | 397 |
| Select hickory | 11,078 | -- | 2,476 | 2,910 | 4,745 | 947 | -- | -- | -- | -- | -- |
| Other hickory | 3,609 | -- | 2,958 | 651 | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 35,489 | -- | 3,710 | 7,318 | 6,286 | 4,766 | 4,737 | 2,464 | 2,849 | 937 | 2,422 |
| Beech | 4,471 | -- | -- | -- | 1,412 | 964 | -- | 424 | 557 | 1,114 | -- |
| Yellow birch | 26,014 | -- | 4,545 | 5,781 | 4,988 | 4,197 | 1,548 | 1,256 | 3,414 | 285 | -- |
| Hard maple | 115,456 | -- | 13,184 | 24,288 | 21,599 | 18,420 | 10,659 | 9,106 | 11,104 | 7,096 | -- |
| Soft maple | 93,064 | -- | 14,042 | 17,639 | 15,705 | 12,585 | 8,138 | 7,003 | 8,567 | 5,706 | 3,679 |
| Elm | 60,674 | -- | 8,363 | 11,912 | 14,276 | 6,116 | 6,012 | 3,284 | 5,754 | 4,957 | -- |
| Black ash | 5,664 | -- | 2,327 | 1,531 | 1,806 | -- | -- | -- | -- | -- | -- |
| White & green ash | 16,362 | -- | 3,084 | 3,585 | 2,734 | 2,216 | 518 | -- | 4,225 | -- | -- |
| Cottonwood | 4,191 | -- | 474 | 692 | -- | -- | 574 | -- | 1,538 | -- | 913 |
| Willow | 8,857 | -- | 559 | 1,076 | 1,599 | 616 | 646 | 1,306 | 2,195 | 860 | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 799 | -- | -- | -- | -- | 799 | -- | -- | -- | -- | -- |
| Bigtooth aspen | 12,280 | -- | 3,210 | 4,770 | 1,710 | 2,210 | 380 | -- | -- | -- | -- |
| Quaking aspen | 26,071 | -- | 11,019 | 11,609 | 2,603 | 564 | 276 | -- | -- | -- | -- |
| Paper birch | 22,989 | -- | 9,672 | 8,573 | 3,240 | -- | 1,173 | 331 | -- | -- | -- |
| River birch | 2,121 | -- | -- | -- | 1,190 | -- | 931 | -- | -- | -- | -- |
| Black cherry | 16,526 | -- | 1,159 | 7,182 | 5,029 | 347 | 546 | 1,132 | 1,131 | -- | -- |
| Black walnut | 2,088 | -- | 573 | -- | -- | 722 | 793 | -- | -- | -- | -- |
| Butternut | 7,470 | -- | 1,633 | 1,733 | 3,087 | 499 | -- | -- | 518 | -- | -- |
| Other hardwoods | 10,047 | -- | 2,656 | 2,724 | 2,088 | 1,449 | -- | -- | 524 | 606 | -- |
| Total | 941,972 | -- | 127,328 | 210,160 | 185,813 | 119,157 | 79,836 | 69,359 | 100,917 | 40,531 | 8,871 |
| All species | 1,055,887 | 28,633 | 155,427 | 231,872 | 192,696 | 127,057 | 85,073 | 72,792 | 108,983 | 44,483 | 8,871 |

[1] International 1/4-inch rule.

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## Table 42.--Net annual growth of growing stock on commercial forest land by softwoods and hardwoods, Wisconsin, 1967 and 1982

(In thousand cubic feet)

| Species | 1967[1] | 1982 |
|---|---|---|
| Softwoods | 114,676 | 142,663 |
| Hardwoods | 304,748 | 348,573 |
| All species | 419,424 | 491,236 |

[1] Figures have been adjusted from those published after the 1968 survey to conform to 1982 volumes because of changes in survey definitions and procedures.

## Table 43.--Net annual growth of growing stock on commercial forest land by species group and Forest Survey Unit, Wisconsin, 1982

(In thousand cubic feet)

| Species group | All Units | Forest Survey Unit | | | | |
|---|---|---|---|---|---|---|
| | | Northeast | Northwest | Central | Southwest | Southeast |
| Softwoods | | | | | | |
| Jack pine | 23,092 | 4,081 | 10,607 | 8,124 | 193 | 87 |
| Red pine | 43,977 | 13,113 | 8,768 | 15,411 | 4,659 | 2,026 |
| White pine | 16,876 | 5,033 | 4,234 | 6,226 | 508 | 875 |
| White spruce | 10,934 | 3,553 | 6,875 | 37 | 23 | 446 |
| Black spruce | 5,491 | 2,656 | 2,338 | 305 | 38 | 154 |
| Balsam fir | 22,338 | 9,621 | 11,877 | 773 | 3 | 64 |
| Hemlock | 2,840 | 1,900 | 466 | 375 | -- | 99 |
| Tamarack | 2,041 | 1,004 | 796 | 240 | -- | 1 |
| Eastern redcedar | 244 | -- | -- | 21 | 96 | 127 |
| Northern white-cedar | 14,647 | 7,818 | 3,560 | 1,068 | -- | 2,201 |
| Other softwoods | 183 | -- | 16 | 140 | -- | 27 |
| Total | 142,663 | 48,779 | 49,537 | 32,720 | 5,520 | 6,107 |
| Hardwoods | | | | | | |
| White oak | 11,453 | 133 | 1,287 | 2,950 | 5,072 | 2,011 |
| Select red oak | 34,507 | 5,502 | 10,720 | 8,337 | 8,644 | 1,304 |
| Other red oak | 15,934 | -251 | -194 | 10,830 | 4,184 | 1,365 |
| Select hickory | 2,876 | -- | -- | 113 | 1,927 | 836 |
| Other hickory | 3,233 | 492 | 210 | 285 | 1,909 | 337 |
| Basswood | 25,979 | 8,458 | 10,794 | 2,344 | 3,570 | 813 |
| Beech | 653 | 197 | -- | 7 | -- | 449 |
| Yellow birch | 2,673 | 807 | 1,174 | 454 | 38 | 200 |
| Hard maple | 46,806 | 20,074 | 18,495 | 3,318 | 3,102 | 1,817 |
| Soft maple | 51,605 | 12,592 | 22,289 | 12,334 | 2,740 | 1,650 |
| Elm | -359 | 584 | 2,978 | -1,059 | -886 | -1,976 |
| Black ash | 14,885 | 2,493 | 8,627 | 2,080 | 465 | 1,220 |
| White & green ash | 11,329 | 2,385 | 3,269 | 1,837 | 1,417 | 2,421 |
| Cottonwood | 1,008 | 398 | -- | 38 | 474 | 98 |
| Willow | 536 | 35 | 4 | 17 | 191 | 289 |
| Hackberry | 102 | -- | -- | -- | 87 | 15 |
| Balsam poplar | 733 | 450 | 198 | -4 | 62 | 27 |
| Bigtooth aspen | 19,240 | 4,457 | 8,194 | 4,296 | 1,907 | 386 |
| Quaking aspen | 60,648 | 17,069 | 26,291 | 13,046 | 2,607 | 1,635 |
| Paper birch | 34,906 | 11,710 | 14,620 | 5,352 | 2,689 | 535 |
| River birch | 127 | -- | -- | -12 | 139 | -- |
| Black cherry | 6,300 | 1,757 | 562 | 581 | 2,221 | 1,179 |
| Black walnut | 611 | -- | -- | 6 | 438 | 167 |
| Butternut | 1,211 | 83 | 170 | 86 | 809 | 63 |
| Other hardwoods | 1,577 | 2 | 2 | 220 | 903 | 450 |
| Total | 348,573 | 89,427 | 129,690 | 67,456 | 44,709 | 17,291 |
| All species | 491,236 | 138,206 | 179,227 | 100,176 | 50,229 | 23,398 |

Table 44.--Net annual growth of sawtimber on commercial forest land by species group and Forest Survey Unit, Wisconsin, 1982

(In thousand board feet)[1]

| Species group | All Units | Forest Survey Unit |  |  |  |  |
|---|---|---|---|---|---|---|
|  |  | Northeast | Northwest | Central | Southwest | Southeast |
| Softwoods |  |  |  |  |  |  |
| Jack pine | 71,795 | 14,570 | 32,952 | 23,196 | 951 | 126 |
| Red pine | 122,739 | 49,511 | 36,234 | 27,575 | 6,865 | 2,554 |
| White pine | 83,335 | 25,274 | 24,449 | 29,065 | 1,834 | 2,713 |
| White spruce | 39,075 | 12,294 | 25,900 | 157 | -- | 724 |
| Black spruce | 4,577 | 3,105 | 1,324 | 148 | -- | -- |
| Balsam fir | 69,757 | 27,430 | 40,466 | 1,129 | -- | 732 |
| Hemlock | 12,886 | 9,082 | 2,382 | 1,289 | -- | 133 |
| Tamarack | 7,231 | 1,785 | 4,123 | 874 | -- | 449 |
| Eastern redcedar | 251 | -- | -- | 85 | 105 | 61 |
| Northern white-cedar | 46,882 | 20,417 | 18,269 | 1,476 | -- | 6,720 |
| Other softwoods | 413 | -- | 99 | 314 | -- | -- |
| Total | 458,941 | 163,468 | 186,198 | 85,308 | 9,755 | 14,212 |
| Hardwoods |  |  |  |  |  |  |
| White oak | 57,123 | 445 | 5,331 | 13,744 | 26,203 | 11,400 |
| Select red oak | 153,714 | 21,591 | 43,540 | 38,379 | 42,851 | 7,353 |
| Other red oak | 71,490 | 4,530 | 5,156 | 36,212 | 19,558 | 6,034 |
| Select hickory | 10,023 | -- | -- | 251 | 6,446 | 3,326 |
| Other hickory | 4,324 | 528 | 166 | 820 | 2,165 | 645 |
| Basswood | 88,496 | 26,460 | 36,516 | 7,683 | 15,119 | 2,718 |
| Beech | 1,679 | 162 | -- | 1,198 | -- | 319 |
| Yellow birch | 7,464 | 1,704 | 3,607 | 1,981 | 85 | 87 |
| Hard maple | 109,715 | 44,631 | 34,046 | 11,491 | 12,036 | 7,511 |
| Soft maple | 77,489 | 16,033 | 26,531 | 21,042 | 7,818 | 6,065 |
| Elm | 4,764 | 6,322 | 13,119 | -2,676 | -3,154 | -8,847 |
| Black ash | 30,485 | 3,832 | 15,970 | 5,536 | 1,111 | 4,036 |
| White & green ash | 41,618 | 9,304 | 11,871 | 4,896 | 7,112 | 8,435 |
| Cottonwood | 4,266 | 1,776 | -- | 140 | 2,143 | 207 |
| Willow | 2,258 | 132 | 16 | -26 | 1,055 | 1,081 |
| Hackberry | 361 | -- | -- | -- | 251 | 110 |
| Balsam poplar | 2,032 | 1,087 | 470 | -- | 428 | 47 |
| Bigtooth aspen | 66,267 | 13,273 | 31,043 | 12,694 | 6,719 | 2,538 |
| Quaking aspen | 168,395 | 53,832 | 80,988 | 22,119 | 7,099 | 4,357 |
| Paper birch | 57,418 | 20,415 | 26,972 | 3,406 | 5,870 | 755 |
| River birch | 283 | -- | -- | 17 | 266 | -- |
| Black cherry | 11,414 | 2,282 | 1,038 | 379 | 3,868 | 3,847 |
| Black walnut | 3,762 | -- | -- | 25 | 3,057 | 680 |
| Butternut | 6,428 | 715 | 723 | 1,682 | 3,200 | 108 |
| Other hardwoods | 2,810 | 9 | -- | 884 | 1,631 | 286 |
| Total | 984,078 | 229,063 | 337,103 | 181,877 | 172,937 | 63,098 |
| All species | 1,443,019 | 392,531 | 523,301 | 267,185 | 182,692 | 77,310 |

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[1] International 1/4-inch rule

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### Table 45.--Net annual growth of growing stock on commercial forest land by species group and ownership class, Wisconsin, 1982

(In thousand cubic feet)

| | | Ownership class | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Species group | All owners | National Forest | Misc. federal | State | County & municipal | Indian | Forest industry | Farmer | Misc. priv.-corp. | Misc. priv.-indiv. |
| Softwoods | | | | | | | | | | |
| Jack pine | 23,092 | 1,794 | 760 | 1,407 | 5,422 | 380 | 2,778 | 2,446 | 920 | 7,185 |
| Red pine | 43,977 | 4,741 | 408 | 2,357 | 8,023 | 472 | 3,154 | 5,072 | 2,742 | 17,008 |
| White pine | 16,876 | 1,305 | 344 | 930 | 1,509 | 1,327 | 972 | 3,922 | 740 | 5,827 |
| White spruce | 10,934 | 4,662 | 32 | 479 | 1,471 | 14 | 1,090 | 470 | 424 | 2,292 |
| Black spruce | 5,491 | 413 | -- | 429 | 1,285 | 284 | 789 | 381 | 58 | 1,852 |
| Balsam fir | 22,338 | -389 | -- | 962 | 5,161 | 581 | 2,961 | 2,070 | 1,499 | 9,493 |
| Hemlock | 2,840 | 263 | -- | 12 | 163 | 583 | 599 | 488 | 165 | 567 |
| Tamarack | 2,041 | 87 | -1 | 230 | 318 | -2 | 203 | 127 | -15 | 1,094 |
| Eastern redcedar | 244 | -- | -- | -- | -- | -- | -- | 186 | -- | 58 |
| Northern white-cedar | 14,647 | 1,508 | -- | 403 | 1,709 | 845 | 1,242 | 3,295 | 397 | 5,248 |
| Other softwoods | 183 | -- | -- | 27 | -- | -- | -- | 33 | 11 | 112 |
| Total | 142,663 | 14,384 | 1,543 | 7,236 | 25,061 | 4,484 | 13,788 | 18,490 | 6,941 | 50,736 |
| Hardwoods | | | | | | | | | | |
| White oak | 11,453 | 87 | 22 | 398 | 630 | 39 | 74 | 6,121 | 468 | 3,614 |
| Select red oak | 34,507 | 2,550 | 319 | 854 | 4,206 | 829 | 1,328 | 12,327 | 1,291 | 10,803 |
| Other red oak | 15,934 | 2 | 562 | 441 | 638 | 39 | 251 | 6,035 | 854 | 7,112 |
| Select hickory | 2,876 | -- | -- | 4 | -- | -- | 13 | 1,934 | 176 | 749 |
| Other hickory | 3,233 | 18 | -- | 35 | 51 | 91 | 120 | 2,202 | 193 | 523 |
| Basswood | 25,979 | 3,371 | 9 | 499 | 3,778 | 1,015 | 3,581 | 4,520 | 851 | 8,355 |
| Beech | 653 | -- | -- | -- | -- | -8 | 24 | 43 | 10 | 584 |
| Yellow birch | 2,673 | 539 | -- | 76 | 191 | 56 | 539 | 373 | 100 | 799 |
| Hard maple | 46,806 | 8,524 | 16 | 817 | 5,967 | 1,625 | 6,990 | 8,004 | 2,088 | 12,775 |
| Soft maple | 51,605 | 4,966 | 1,035 | 1,740 | 8,928 | 1,313 | 4,145 | 9,689 | 1,924 | 17,865 |
| Elm | -359 | -1,384 | -434 | -162 | 752 | -85 | 626 | -1,332 | 66 | 1,594 |
| Black ash | 14,885 | 1,951 | 58 | 774 | 2,374 | 4 | 1,340 | 2,543 | 396 | 5,445 |
| White & green ash | 11,329 | 578 | 68 | 221 | 733 | 208 | 970 | 4,747 | 470 | 3,334 |
| Cottonwood | 1,008 | -- | 44 | 44 | 13 | -- | 4 | 347 | 362 | 194 |
| Willow | 536 | -- | 6 | 153 | 16 | -- | 12 | 220 | 62 | 67 |
| Hackberry | 102 | -- | -- | -- | -- | -- | -- | 67 | 11 | 24 |
| Balsam poplar | 733 | 153 | -- | 11 | 152 | -5 | 15 | 77 | 51 | 279 |
| Bigtooth aspen | 19,240 | 3,090 | 198 | 450 | 2,829 | 635 | 705 | 3,872 | 785 | 6,676 |
| Quaking aspen | 60,648 | 6,328 | 525 | 2,500 | 11,581 | 808 | 4,081 | 11,112 | 2,449 | 21,264 |
| Paper birch | 34,906 | 2,300 | 166 | 1,613 | 6,482 | 956 | 3,264 | 6,568 | 1,778 | 11,779 |
| River birch | 127 | -- | -12 | 26 | 5 | -- | -- | -1 | 82 | 27 |
| Black cherry | 6,300 | 385 | -- | 292 | 372 | -3 | 248 | 2,850 | 267 | 1,889 |
| Black walnut | 611 | -- | -- | -- | 13 | -- | -- | 430 | 17 | 151 |
| Butternut | 1,211 | 24 | -- | 8 | -4 | 18 | 22 | 653 | 168 | 322 |
| Other hardwoods | 1,577 | -- | 2 | 7 | 2 | 2 | -- | 1,130 | -- | 434 |
| Total | 348,573 | 33,482 | 2,584 | 10,801 | 49,709 | 7,537 | 28,352 | 84,531 | 14,919 | 116,658 |
| All species | 491,236 | 47,866 | 4,127 | 18,037 | 74,770 | 12,021 | 42,140 | 103,021 | 21,860 | 167,394 |

Table 46.--Net annual growth of sawtimber on commercial forest land by species group and ownership class, Wisconsin, 1982

(In thousand board feet)[1]

| Species group | All owners | Ownership class | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | National Forest | Misc. federal | State | County & municipal | Indian | Forest industry | Farmer | Misc. priv.-corp. | Misc. priv.-indiv. |
| Softwoods | | | | | | | | | | |
| Jack pine | 71,795 | 6,640 | 2,472 | 5,122 | 10,515 | 1,403 | 9,161 | 8,887 | 4,146 | 23,449 |
| Red pine | 122,739 | 35,594 | 1,564 | 8,062 | 21,259 | 3,079 | 8,611 | 9,247 | 6,296 | 29,027 |
| White pine | 83,335 | 7,291 | 1,309 | 3,924 | 8,040 | 7,589 | 4,644 | 19,508 | 5,025 | 26,005 |
| White spruce | 39,075 | 14,289 | 81 | 1,630 | 7,187 | 61 | 4,302 | 2,180 | 1,371 | 7,974 |
| Black spruce | 4,577 | 693 | -- | -16 | 962 | 274 | 670 | 217 | 157 | 1,620 |
| Balsam fir | 69,757 | 8,191 | -- | 3,150 | 16,908 | 1,129 | 11,364 | 3,710 | 4,254 | 21,051 |
| Hemlock | 12,886 | 1,398 | -- | 78 | 871 | 2,587 | 3,070 | 1,978 | 851 | 2,053 |
| Tamarack | 7,231 | 142 | 16 | 972 | 1,951 | 50 | 244 | 1,107 | 284 | 2,465 |
| Eastern redcedar | 251 | -- | -- | -- | -- | -- | -- | 209 | -- | 42 |
| Northern white-cedar | 46,882 | 6,841 | -- | 1,609 | 5,556 | 2,183 | 7,627 | 8,277 | 2,095 | 12,694 |
| Other softwoods | 413 | -- | -- | -- | -- | -- | -- | 197 | 58 | 158 |
| Total | 458,941 | 81,079 | 5,442 | 24,531 | 73,249 | 18,355 | 49,693 | 55,517 | 24,537 | 126,538 |
| Hardwoods | | | | | | | | | | |
| White oak | 57,123 | -- | 108 | 1,509 | 1,345 | 133 | 312 | 35,506 | 1,607 | 16,603 |
| Select red oak | 153,714 | 6,849 | 664 | 3,923 | 14,592 | 5,019 | 5,194 | 60,932 | 7,491 | 49,050 |
| Other red oak | 71,490 | -- | 816 | 2,730 | 6,255 | 511 | 1,216 | 25,393 | 3,699 | 30,870 |
| Select hickory | 10,023 | -- | -- | 26 | -- | -- | -- | 5,764 | 1,325 | 2,908 |
| Other hickory | 4,324 | 27 | -- | 114 | 8 | 165 | 79 | 2,023 | 124 | 1,784 |
| Basswood | 88,496 | 14,166 | -- | 1,062 | 9,684 | 4,600 | 8,338 | 18,595 | 2,756 | 29,295 |
| Beech | 1,679 | -- | -- | -- | -- | -10 | 83 | 626 | 37 | 943 |
| Yellow birch | 7,464 | 1,540 | -- | 159 | 679 | -194 | 2,029 | 1,124 | -269 | 2,396 |
| Hard maple | 109,715 | 14,578 | 75 | 1,817 | 7,670 | 4,399 | 15,952 | 26,137 | 4,058 | 35,029 |
| Soft maple | 77,489 | 7,294 | 2,478 | 3,307 | 6,115 | 996 | 4,511 | 24,004 | 2,269 | 26,515 |
| Elm | 4,764 | -609 | -1,589 | -882 | 1,949 | -122 | 3,554 | -4,051 | -710 | 7,224 |
| Black ash | 30,485 | 459 | 74 | 1,100 | 7,680 | -56 | 2,442 | 9,170 | 2,259 | 7,357 |
| White & green ash | 41,618 | 3,787 | 352 | 837 | 3,904 | 295 | 4,249 | 17,377 | 1,466 | 9,351 |
| Cottonwood | 4,266 | -- | 461 | 108 | 69 | -- | 21 | 1,432 | 1,334 | 841 |
| Willow | 2,258 | -- | 28 | 221 | 38 | -- | 56 | 559 | 350 | 1,006 |
| Hackberry | 361 | -- | -- | -- | -- | -- | -- | 251 | -- | 110 |
| Balsam poplar | 2,032 | 83 | -- | 9 | 444 | -63 | 139 | 639 | 144 | 637 |
| Bigtooth aspen | 66,267 | 10,281 | 334 | 1,777 | 5,535 | 1,941 | 3,374 | 15,692 | 2,706 | 24,627 |
| Quaking aspen | 168,395 | 22,829 | 1,422 | 4,256 | 32,152 | 2,579 | 11,987 | 26,697 | 5,267 | 61,206 |
| Paper birch | 57,418 | 7,895 | 11 | 2,642 | 8,154 | 961 | 3,999 | 8,634 | 4,191 | 20,931 |
| River birch | 283 | -- | 22 | 38 | -- | -- | -- | 163 | -60 | 120 |
| Black cherry | 11,414 | 603 | -- | 215 | 563 | 147 | 479 | 5,744 | 721 | 2,942 |
| Black walnut | 3,762 | -- | -- | -- | 1,295 | -- | -- | 1,727 | 94 | 646 |
| Butternut | 6,428 | 281 | -- | 34 | 19 | 122 | 332 | 3,330 | 1,651 | 659 |
| Other hardwoods | 2,810 | -- | -- | 25 | 16 | 9 | -- | 857 | -- | 1,903 |
| Total | 984,078 | 90,063 | 5,256 | 25,027 | 108,166 | 21,432 | 68,346 | 288,325 | 42,510 | 334,953 |
| All species | 1,443,019 | 171,142 | 10,698 | 49,558 | 181,415 | 39,787 | 118,039 | 343,842 | 67,047 | 461,491 |

[1] International 1/4-inch rule

Table 47.--Net annual growth of growing stock on commercial forest land by species group and forest type, Wisconsin, 1982

(In thousand cubic feet)

| Species group | All types | Forest type<br>Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar |
|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | |
| Jack pine | 23,092 | 16,478 | 864 | 423 | 1 | -- | -11 | 30 |
| Red pine | 43,977 | 1,937 | 35,797 | 1,556 | 366 | 27 | 82 | 3 |
| White pine | 16,876 | 324 | 1,338 | 6,845 | 389 | 52 | 113 | 71 |
| White spruce | 10,934 | -- | 130 | 69 | 1,367 | 4,579 | 25 | 130 |
| Black spruce | 5,491 | 20 | 76 | 25 | 640 | 1 | 2,965 | 417 |
| Balsam fir | 22,338 | 7 | 182 | 124 | 5,134 | 94 | 928 | 761 |
| Hemlock | 2,840 | -- | 7 | 51 | 16 | 3 | 27 | 81 |
| Tamarack | 2,041 | -- | -- | -10 | 59 | -- | 48 | 224 |
| Eastern redcedar | 244 | 8 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 14,647 | -- | 22 | 26 | 1,373 | 44 | 237 | 8,880 |
| Other softwoods | 183 | -- | 82 | 38 | -- | -- | -- | -- |
| Total | 142,663 | 18,774 | 38,498 | 9,147 | 9,345 | 4,800 | 4,414 | 10,597 |
| Hardwoods | | | | | | | | |
| White oak | 11,453 | 8 | 10 | 48 | 1 | -- | -- | -- |
| Select red oak | 34,507 | 108 | 165 | 68 | 13 | -- | 24 | 6 |
| Other red oak | 15,934 | 382 | -13 | 176 | -14 | -- | -- | 4 |
| Select hickory | 2,876 | -- | -- | 22 | -- | -- | -- | 13 |
| Other hickory | 3,233 | -- | -- | -- | -- | -- | -- | 9 |
| Basswood | 25,979 | 2 | 2 | 10 | 4 | 19 | -- | 29 |
| Beech | 653 | -- | -3 | -- | -- | -- | -- | -- |
| Yellow birch | 2,673 | -- | -- | -11 | -28 | -- | 4 | 163 |
| Hard maple | 46,806 | -- | 74 | 31 | 58 | 8 | 7 | 7 |
| Soft maple | 51,605 | 15 | 149 | 502 | 401 | 13 | 39 | 31 |
| Elm | -359 | 13 | 98 | -58 | 36 | -3 | -- | -173 |
| Black ash | 14,885 | -- | -- | 19 | 770 | 3 | -- | 652 |
| White & green ash | 11,329 | -- | 51 | -- | 6 | 30 | -- | 8 |
| Cottonwood | 1,008 | 9 | -- | 329 | -- | -- | -- | -- |
| Willow | 536 | -- | -- | -- | -- | -- | -- | 8 |
| Hackberry | 102 | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 733 | -- | -- | -- | 43 | 11 | 7 | -14 |
| Bigtooth aspen | 19,240 | 340 | 84 | 213 | 41 | 4 | -32 | 41 |
| Quaking aspen | 60,648 | 310 | 584 | 1,310 | 385 | 439 | 629 | 72 |
| Paper birch | 34,906 | 92 | 141 | 216 | 572 | 7 | 89 | 407 |
| River birch | 127 | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 6,300 | -- | 8 | 80 | 13 | 3 | 149 | -- |
| Black walnut | 611 | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 1,211 | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | 1,577 | -- | 12 | -- | -- | -- | -- | -- |
| Total | 348,573 | 1,279 | 1,362 | 2,955 | 2,301 | 534 | 916 | 1,263 |
| All species | 491,236 | 20,053 | 39,860 | 12,102 | 11,646 | 5,334 | 5,330 | 11,860 |

(Table 47 continued on next page)

(Table 47 continued)

| Species group | Forest type | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Tamarack | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Non-stocked |
| Softwoods | | | | | | | | |
| Jack pine | 17 | 2,976 | 9 | 267 | 1,883 | 63 | -- | 92 |
| Red pine | 10 | 1,200 | 20 | 767 | 1,830 | 374 | -- | 8 |
| White pine | 243 | 1,419 | 769 | 3,221 | 1,570 | 501 | -- | 21 |
| White spruce | 20 | 122 | 369 | 918 | 2,633 | 564 | -- | 8 |
| Black spruce | 497 | -- | 74 | 143 | 500 | 119 | -- | 14 |
| Balsam fir | 587 | 62 | 2,296 | 3,866 | 6,795 | 1,497 | -- | 5 |
| Hemlock | -5 | 17 | 284 | 2,232 | 108 | 19 | -- | -- |
| Tamarack | 1,501 | 5 | 41 | -6 | 120 | 28 | -- | 31 |
| Eastern redcedar | -- | 130 | 80 | 26 | -- | -- | -- | -- |
| Northern white-cedar | 52 | 9 | 1,740 | 1,479 | 521 | 264 | -- | -- |
| Other softwoods | -- | 20 | -- | 5 | -- | -- | 38 | -- |
| Total | 2,922 | 5,960 | 5,682 | 12,918 | 15,960 | 3,429 | 38 | 179 |
| Hardwoods | | | | | | | | |
| White oak | -- | 8,884 | 431 | 1,315 | 543 | 181 | -- | 32 |
| Select red oak | -3 | 21,369 | 356 | 7,343 | 3,708 | 1,337 | -- | 13 |
| Other red oak | -- | 13,624 | 240 | 729 | 739 | 8 | -- | 59 |
| Select hickory | -- | 2,345 | 2 | 362 | 13 | 119 | -- | -- |
| Other hickory | -- | 1,578 | 23 | 1,479 | 144 | -- | -- | -- |
| Basswood | -- | 2,224 | 1,191 | 21,094 | 1,138 | 240 | -- | 26 |
| Beech | -- | 8 | 11 | 637 | -- | -- | -- | -- |
| Yellow birch | 5 | 18 | 272 | 2,061 | 131 | 58 | -- | -- |
| Hard maple | 5 | 1,438 | 624 | 40,818 | 3,087 | 582 | -- | 67 |
| Soft maple | 207 | 3,926 | 9,965 | 21,193 | 12,388 | 2,773 | -- | 3 |
| Elm | 18 | -385 | -1,017 | 731 | 477 | 109 | -- | -205 |
| Black ash | 20 | 163 | 8,864 | 2,524 | 1,673 | 161 | -- | 36 |
| White & green ash | -- | 1,020 | 2,400 | 7,152 | 508 | 147 | -- | 7 |
| Cottonwood | -- | 167 | 249 | 112 | 138 | 4 | -- | -- |
| Willow | -- | -- | 344 | 77 | 85 | 15 | -- | 7 |
| Hackberry | -- | 24 | 30 | 48 | -- | -- | -- | -- |
| Balsam poplar | -9 | 44 | 94 | -17 | 499 | 75 | -- | -- |
| Bigtooth aspen | 338 | 2,362 | 67 | 2,706 | 12,526 | 550 | -- | -- |
| Quaking aspen | 273 | 2,334 | 1,613 | 6,647 | 44,027 | 1,983 | -- | 42 |
| Paper birch | 153 | 3,550 | 928 | 5,214 | 11,205 | 12,257 | -- | 75 |
| River birch | -- | 3 | 124 | -- | -- | -- | -- | -- |
| Black cherry | 1 | 2,037 | 68 | 2,550 | 1,260 | 131 | -- | -- |
| Black walnut | -- | 483 | -- | 116 | -- | -- | -- | 12 |
| Butternut | -- | 501 | 4 | 653 | 38 | 10 | -- | 5 |
| Other hardwoods | -- | 311 | 465 | 625 | 158 | 6 | -- | -- |
| Total | 1,008 | 68,028 | 27,348 | 126,169 | 94,485 | 20,746 | -- | 179 |
| All species | 3,930 | 73,988 | 33,030 | 139,087 | 110,445 | 24,175 | 38 | 358 |

Table 48.--Net annual growth of sawtimber on commercial forest land by species group and forest type, Wisconsin, 1982

(In thousand board feet)[1]

| Species group | All types | Forest type<br>Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar |
|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | |
| Jack pine | 71,795 | 46,252 | 3,104 | 1,127 | 12 | -- | -72 | -- |
| Red pine | 122,739 | 4,205 | 92,046 | 5,343 | 1,830 | -- | 1,107 | 14 |
| White pine | 83,335 | 1,879 | 5,520 | 31,684 | 2,139 | 310 | 311 | 126 |
| White spruce | 39,075 | -- | 575 | 552 | 5,356 | 14,550 | 120 | 512 |
| Black spruce | 4,577 | 487 | -- | -109 | 839 | 59 | 1,159 | 1,047 |
| Balsam fir | 69,757 | -- | 758 | 514 | 22,458 | 318 | 3,768 | 1,437 |
| Hemlock | 12,886 | -- | 35 | 341 | 102 | 15 | 158 | 297 |
| Tamarack | 7,231 | -- | -- | 210 | 509 | -- | 35 | 679 |
| Eastern redcedar | 251 | 85 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 46,882 | -- | 68 | 89 | 4,924 | -- | 726 | 23,926 |
| Other softwoods | 413 | -- | 314 | 99 | -- | -- | -- | -- |
| Total | 458,941 | 52,908 | 102,420 | 39,850 | 38,169 | 15,252 | 7,312 | 28,038 |
| Hardwoods | | | | | | | | |
| White oak | 57,123 | -- | 96 | 129 | -- | -- | -- | 9 |
| Select red oak | 153,714 | 324 | 269 | 202 | 57 | -- | 75 | 31 |
| Other red oak | 71,490 | 1,413 | 561 | 564 | -- | -- | -3 | 22 |
| Select hickory | 10,023 | -- | -- | -- | -- | -- | -- | 76 |
| Other hickory | 4,324 | -- | -- | -- | -- | -- | -- | 25 |
| Basswood | 88,496 | -- | 12 | -6 | 23 | -- | -- | 150 |
| Beech | 1,679 | -- | 1,079 | -- | -- | -- | -- | -- |
| Yellow birch | 7,464 | -- | 3 | -80 | -122 | -- | 21 | 18 |
| Hard maple | 109,715 | -- | 898 | 156 | 134 | 33 | 6 | 89 |
| Soft maple | 77,489 | -- | 1 | 428 | 205 | 95 | 97 | -133 |
| Elm | 4,764 | 104 | -- | -43 | 210 | -11 | -- | -516 |
| Black ash | 30,485 | -- | -- | 149 | 1,943 | 11 | -- | -9 |
| White & green ash | 41,618 | -- | 676 | -- | -- | -- | -- | 33 |
| Cottonwood | 4,266 | -- | -- | 1,311 | -- | -- | -- | -- |
| Willow | 2,258 | -- | -- | -- | -- | -- | -- | 37 |
| Hackberry | 361 | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 2,032 | -- | -- | -- | 8 | 50 | -- | -61 |
| Bigtooth aspen | 66,267 | 454 | 262 | 283 | 18 | -- | -102 | 59 |
| Quaking aspen | 168,395 | 533 | 2,037 | 2,094 | 3,015 | 960 | 1,276 | 1,199 |
| Paper birch | 57,418 | 97 | 577 | 661 | 2,595 | -- | 194 | 411 |
| River birch | 283 | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 11,414 | -- | 6 | -- | 131 | 94 | -- | -- |
| Black walnut | 3,762 | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 6,428 | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | 2,810 | -- | 66 | -- | -- | -- | -- | -- |
| Total | 984,078 | 2,925 | 6,543 | 5,848 | 8,217 | 1,232 | 1,564 | 1,440 |
| All species | 1,443,019 | 55,833 | 108,963 | 45,698 | 46,386 | 16,484 | 8,876 | 29,478 |

(Table 48 continued on next page)

[1] International 1/4-inch rule

(Table 48 continued)

| | Forest type | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Species group | Tamarack | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Non-stocked |
| Softwoods | | | | | | | | |
| Jack pine | -- | 10,893 | 119 | 719 | 9,196 | 276 | -- | 169 |
| Red pine | 54 | 2,914 | 117 | 3,980 | 8,575 | 2,509 | -- | 45 |
| White pine | 1,277 | 7,414 | 3,822 | 17,525 | 8,289 | 2,651 | -- | 388 |
| White spruce | 70 | -- | 2,030 | 5,031 | 8,242 | 1,992 | -- | 45 |
| Black spruce | 359 | -- | 245 | 103 | 281 | 19 | -- | 88 |
| Balsam fir | 106 | 78 | 5,772 | 11,490 | 19,560 | 3,498 | -- | -- |
| Hemlock | -20 | 92 | 920 | 10,344 | 509 | 93 | -- | -- |
| Tamarack | 2,134 | 38 | 1,108 | 173 | 1,500 | 119 | -- | 726 |
| Eastern redcedar | -- | 61 | -- | 105 | -- | -- | -- | -- |
| Northern white-cedar | 590 | -- | 7,685 | 6,034 | 2,082 | 758 | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 4,570 | 21,490 | 21,818 | 55,504 | 58,234 | 11,915 | -- | 1,461 |
| Hardwoods | | | | | | | | |
| White oak | -- | 44,011 | 1,327 | 8,284 | 1,531 | 1,669 | -- | 67 |
| Select red oak | 15 | 95,484 | 1,916 | 35,214 | 14,370 | 5,691 | -- | 66 |
| Other red oak | -- | 56,148 | 1,652 | 3,791 | 6,853 | 301 | -- | 188 |
| Select hickory | -- | 8,588 | 9 | 1,046 | -- | 304 | -- | -- |
| Other hickory | -- | 2,405 | -- | 1,871 | 23 | -- | -- | -- |
| Basswood | -- | 7,563 | 3,157 | 74,658 | 2,458 | 434 | -- | 47 |
| Beech | -- | -- | 15 | 585 | -- | -- | -- | -- |
| Yellow birch | -- | 65 | 1,045 | 6,488 | -28 | 54 | -- | -- |
| Hard maple | -- | 3,567 | 829 | 102,064 | 1,557 | 382 | -- | -- |
| Soft maple | 143 | 5,908 | 24,054 | 36,788 | 7,665 | 2,238 | -- | -- |
| Elm | 82 | 69 | -3,841 | 7,217 | 2,349 | -98 | -- | -758 |
| Black ash | -- | 502 | 20,670 | 5,585 | 1,316 | 318 | -- | -- |
| White & green ash | -- | 3,956 | 11,115 | 23,274 | 2,017 | 517 | -- | 30 |
| Cottonwood | -- | 689 | 1,391 | 489 | 367 | 19 | -- | -- |
| Willow | -- | -- | 1,633 | 390 | 103 | 66 | -- | 29 |
| Hackberry | -- | 110 | 156 | 95 | -- | -- | -- | -- |
| Balsam poplar | -- | 298 | 155 | 19 | 1,455 | 108 | -- | -- |
| Bigtooth aspen | 2 | 8,224 | 492 | 7,785 | 45,956 | 2,834 | -- | -- |
| Quaking aspen | 153 | 8,193 | 5,020 | 31,866 | 105,096 | 6,367 | -- | 586 |
| Paper birch | 141 | 4,491 | 3,612 | 15,402 | 14,594 | 14,643 | -- | -- |
| River birch | -- | 89 | 194 | -- | -- | -- | -- | -- |
| Black cherry | -- | 3,274 | 16 | 6,405 | 1,318 | 170 | -- | -- |
| Black walnut | -- | 2,196 | -- | 1,537 | -- | -- | -- | 29 |
| Butternut | -- | 2,685 | 19 | 3,388 | 336 | -- | -- | -- |
| Other hardwoods | -- | 314 | 2,143 | 245 | 42 | -- | -- | -- |
| Total | 536 | 258,829 | 76,779 | 374,486 | 209,378 | 36,017 | -- | 284 |
| All species | 5,106 | 280,319 | 98,597 | 429,990 | 267,612 | 47,932 | -- | 1,745 |

Table 49.--Net annual growth of growing stock on commercial forest land by forest type and stand-age class, Wisconsin, 1982

(In thousand cubic feet)

| Forest type | All classes | Stand-age class (years) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-140 | 141+ |
| Jack pine | 20,053 | 485 | 3,194 | 3,115 | 5,324 | 5,383 | 1,803 | 304 | 370 | 75 | -- | -- | -- | -- |
| Red pine | 39,860 | 304 | 8,559 | 13,142 | 9,899 | 4,548 | 1,902 | 360 | 379 | 348 | 295 | 124 | -- | -- |
| White pine | 12,102 | 210 | 693 | 832 | 1,460 | 1,657 | 885 | 1,604 | 1,610 | 1,311 | 94 | 915 | 298 | 533 |
| Balsam fir | 11,646 | 1,215 | 822 | 1,319 | -18 | 2,205 | 3,181 | 2,011 | 303 | 270 | 62 | 299 | -19 | -4 |
| White spruce | 5,334 | 12 | 275 | 2,012 | 1,451 | 482 | 985 | 117 | -- | -- | -- | -- | -- | -- |
| Black spruce | 5,330 | 338 | 590 | 428 | 600 | 653 | 364 | 240 | 1,439 | 419 | 190 | -- | 69 | -- |
| Northern white-cedar | 11,860 | 194 | 442 | 312 | 355 | 2,028 | 1,592 | 1,937 | 948 | 1,247 | 920 | 604 | 536 | 745 |
| Tamarack | 3,930 | 153 | 311 | 485 | 162 | 1,063 | 426 | 620 | 486 | 124 | -- | 44 | 15 | 41 |
| Oak-hickory | 73,988 | 3,709 | 1,855 | 2,245 | 4,412 | 11,944 | 14,932 | 7,368 | 7,621 | 6,715 | 3,926 | 4,515 | 3,153 | 1,593 |
| Elm-ash-soft maple | 33,030 | 1,751 | 2,068 | 2,515 | 5,159 | 5,767 | 4,184 | 3,676 | 3,475 | 1,641 | 1,216 | 922 | 494 | 162 |
| Maple-birch | 139,087 | 5,348 | 6,453 | 7,152 | 13,337 | 29,100 | 26,938 | 18,580 | 7,628 | 7,917 | 5,957 | 5,677 | 2,420 | 2,580 |
| Aspen | 110,445 | 14,226 | 8,272 | 11,786 | 20,661 | 29,972 | 16,309 | 5,719 | 2,150 | 1,209 | 141 | -- | -- | -- |
| Paper birch | 24,175 | 962 | 2,204 | 2,556 | 3,918 | 5,636 | 5,030 | 2,929 | 664 | 74 | 9 | 193 | -- | -- |
| Exotic | 38 | -- | 38 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 358 | 358 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| All types | 491,236 | 29,265 | 35,776 | 47,899 | 66,720 | 100,438 | 78,531 | 45,465 | 27,073 | 21,350 | 12,810 | 13,293 | 6,966 | 5,650 |

Table 50.--Net annual growth of sawtimber on commercial forest land by forest type and stand-age class, Wisconsin, 1982

(In thousand board feet)[1]

| Forest type | All classes | Stand-age class (years) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-140 | 141+ |
| Jack pine | 55,833 | 2,892 | 1,984 | 1,279 | 9,958 | 22,981 | 12,407 | 1,687 | 2,009 | 636 | -- | -- | -- | -- |
| Red pine | 108,963 | 1,339 | 4,000 | 20,933 | 37,056 | 25,939 | 10,998 | 1,749 | 2,219 | 2,373 | 1,720 | 637 | -- | -- |
| White pine | 45,698 | 851 | 111 | 2,701 | 2,435 | 5,814 | 4,091 | 5,956 | 8,017 | 6,602 | 643 | 3,554 | 1,915 | 3,008 |
| Balsam fir | 46,386 | 1,880 | 867 | 2,481 | 2,861 | 9,516 | 13,754 | 9,890 | 751 | 1,381 | 497 | 2,084 | 250 | 174 |
| White spruce | 16,484 | -- | 327 | 1,883 | 7,231 | 2,424 | 3,811 | 808 | -- | -- | -- | -- | -- | -- |
| Black spruce | 8,876 | 100 | 504 | 191 | 205 | 998 | 275 | 516 | 5,533 | 541 | -21 | -- | 34 | -- |
| Northern white-cedar | 29,478 | 210 | 229 | 1,251 | 223 | 6,390 | 2,610 | 2,541 | 1,657 | 2,099 | 4,049 | 2,377 | 2,890 | 2,952 |
| Tamarack | 5,106 | 380 | 249 | 123 | 135 | 429 | 436 | 1,116 | 1,212 | 735 | -- | 129 | 97 | 65 |
| Oak-hickory | 280,319 | 14,643 | 4,587 | 2,585 | 10,141 | 27,331 | 51,130 | 32,660 | 39,440 | 28,531 | 24,538 | 22,798 | 15,265 | 6,670 |
| Elm-ash-soft maple | 98,597 | 9,790 | 3,452 | 2,382 | 9,270 | 12,282 | 11,924 | 12,165 | 12,463 | 12,588 | 5,431 | 3,958 | 2,112 | 780 |
| Maple-birch | 429,990 | 12,019 | 12,180 | 12,821 | 27,727 | 56,470 | 80,764 | 74,635 | 35,082 | 38,865 | 29,691 | 27,439 | 11,011 | 11,286 |
| Aspen | 267,612 | 36,978 | 12,707 | 16,539 | 41,840 | 64,640 | 52,491 | 21,021 | 13,992 | 5,933 | 1,471 | -- | -- | -- |
| Paper birch | 47,932 | 1,757 | 1,626 | 1,337 | 7,376 | 10,681 | 14,400 | 8,301 | 1,840 | 342 | 77 | 195 | -- | -- |
| Exotic | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 1,745 | 1,745 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| All types | 1,443,019 | 84,584 | 42,823 | 66,506 | 156,458 | 245,895 | 259,091 | 173,045 | 124,215 | 100,626 | 68,096 | 63,171 | 33,574 | 24,935 |

[1] International 1/4-inch rule.

Table 51.--Net annual growth of growing stock on commercial forest land by forest type, stand-size class, and basal-area class, Wisconsin, 1982

(In thousand cubic feet)

| Forest type and stand-size class | All classes | Basal area class (square feet per acre) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| **Jack pine** | | | | | | | | | | | | | | | |
| Sawtimber | 3,125 | -- | -- | -- | 214 | 77 | 374 | 274 | 308 | 455 | 275 | 794 | 245 | 109 | -- |
| Poletimber | 12,065 | -- | -- | -- | 185 | 855 | 581 | 955 | 1,493 | 2,106 | 2,896 | 1,663 | 1,017 | 121 | 193 |
| Sapling & seedling | 4,863 | 15 | 18 | 398 | 282 | 321 | 313 | 738 | 2,616 | 162 | -- | -- | -- | -- | -- |
| All stands | 20,053 | 15 | 18 | 398 | 681 | 1,253 | 1,268 | 1,967 | 4,417 | 2,723 | 3,171 | 2,457 | 1,262 | 230 | 193 |
| **Red pine** | | | | | | | | | | | | | | | |
| Sawtimber | 10,434 | -- | -- | -- | 70 | 71 | 88 | -- | 649 | 749 | 732 | 3,291 | 2,415 | 2,017 | 352 |
| Poletimber | 26,464 | -- | -- | -- | -- | 16 | 231 | 272 | 955 | 2,753 | 1,022 | 5,055 | 5,846 | 4,069 | 6,245 |
| Sapling & seedling | 2,962 | -20 | 182 | 8 | 199 | 65 | 587 | -- | 566 | 142 | 140 | 453 | 640 | -- | -- |
| All stands | 39,860 | -20 | 182 | 8 | 269 | 152 | 906 | 272 | 2,170 | 3,644 | 1,894 | 8,799 | 8,901 | 6,086 | 6,597 |
| **White pine** | | | | | | | | | | | | | | | |
| Sawtimber | 8,433 | -- | 43 | 9 | 244 | 38 | 171 | 76 | 269 | 631 | 479 | 2,553 | 2,304 | 1,063 | 553 |
| Poletimber | 3,182 | -- | -- | -- | -- | -- | 121 | -- | 182 | 200 | 435 | 1,229 | 612 | 403 | -- |
| Sapling & seedling | 487 | -- | -- | -- | -- | 30 | 121 | -- | 336 | -- | -- | -- | -- | -- | -- |
| All stands | 12,102 | -- | 43 | 9 | 244 | 68 | 413 | 76 | 787 | 831 | 914 | 3,782 | 2,916 | 1,466 | 553 |
| **Balsam fir** | | | | | | | | | | | | | | | |
| Sawtimber | 2,915 | -- | -- | -- | -- | 204 | 32 | 111 | -72 | 330 | 265 | 643 | 982 | 186 | 234 |
| Poletimber | 5,825 | -- | -- | 19 | -- | 38 | -1,045 | 670 | 348 | 897 | 196 | 755 | 1,968 | 1,256 | 723 |
| Sapling & seedling | 2,906 | 58 | 76 | 201 | 87 | 383 | 264 | 430 | 697 | 55 | 361 | 203 | 47 | 44 | -- |
| All stands | 11,646 | 58 | 76 | 220 | 87 | 625 | -749 | 1,211 | 973 | 1,282 | 822 | 1,601 | 2,997 | 1,486 | 957 |
| **White spruce** | | | | | | | | | | | | | | | |
| Sawtimber | 2,440 | -- | -- | -- | -- | -- | -- | 195 | -- | -- | -- | -- | -- | 1,170 | 1,075 |
| Poletimber | 2,752 | -- | -- | -- | -- | -- | -- | -- | -- | 156 | 288 | 143 | 1,921 | 244 | -- |
| Sapling & seedling | 142 | -- | -- | 12 | -- | 9 | 111 | -- | 10 | -- | -- | -- | -- | -- | -- |
| All stands | 5,334 | -- | -- | 12 | -- | 9 | 111 | 195 | 10 | 156 | 288 | 143 | 1,921 | 1,414 | 1,075 |
| **Black spruce** | | | | | | | | | | | | | | | |
| Sawtimber | 165 | -- | 69 | -- | -- | -- | -- | 40 | -- | -- | -- | -- | 56 | -- | -- |
| Poletimber | 3,349 | -- | -- | 26 | -- | -- | 203 | 361 | 292 | 255 | 1,077 | 289 | 730 | 116 | -- |
| Sapling & seedling | 1,816 | 86 | 30 | 175 | 129 | 63 | 79 | 469 | 172 | 407 | 68 | 72 | 66 | -- | -- |
| All stands | 5,330 | 86 | 99 | 201 | 129 | 63 | 282 | 870 | 464 | 662 | 1,145 | 361 | 852 | 116 | -- |
| **Northern white-cedar** | | | | | | | | | | | | | | | |
| Sawtimber | 3,150 | -- | -- | -- | -- | 20 | 1 | 59 | 128 | 130 | 53 | 274 | 976 | 634 | 875 |
| Poletimber | 7,524 | -- | -- | -- | -- | -- | 174 | -- | 212 | 366 | 94 | 1,942 | 1,036 | 2,101 | 1,599 |
| Sapling & seedling | 1,186 | -- | -3 | 88 | 11 | 134 | 52 | -- | 195 | 44 | -- | 450 | -- | 215 | -- |
| All stands | 11,860 | -- | -3 | 88 | 11 | 154 | 227 | 59 | 535 | 540 | 147 | 2,666 | 2,012 | 2,950 | 2,474 |

(Table 51 continued on next page)

(Table 51 continued)

| Forest type and stand-size class | All classes | Basal area class (square feet per acre) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| Tamarack | | | | | | | | | | | | | | | |
| Sawtimber | 237 | -- | 11 | 66 | -- | 23 | 23 | 15 | -- | -- | -- | 99 | -- | -- | -- |
| Poletimber | 2,726 | -- | 11 | 11 | 17 | 164 | 166 | 838 | 18 | 659 | 227 | 643 | -28 | -- | -- |
| Sapling & seedling | 967 | 5 | 15 | 152 | 122 | 178 | 110 | 38 | 223 | 24 | 100 | -- | -- | -- | -- |
| All stands | 3,930 | 5 | 37 | 229 | 139 | 365 | 299 | 891 | 241 | 683 | 327 | 742 | -28 | -- | -- |
| Oak-hickory | | | | | | | | | | | | | | | |
| Sawtimber | 38,040 | -- | -36 | 160 | 130 | 1,091 | 1,328 | 1,956 | 3,653 | 5,122 | 3,191 | 10,315 | 8,526 | 2,183 | 421 |
| Poletimber | 29,673 | -- | -- | 5 | 208 | 208 | 1,888 | 1,130 | 3,183 | 4,169 | 3,845 | 6,811 | 5,061 | 2,755 | 410 |
| Sapling & seedling | 6,275 | -- | 327 | 688 | 701 | 1,246 | 1,244 | 764 | 227 | 642 | 169 | 145 | 122 | -- | -- |
| All stands | 73,988 | -- | 291 | 853 | 1,039 | 2,545 | 4,460 | 3,850 | 7,063 | 9,933 | 7,205 | 17,271 | 13,709 | 4,938 | 831 |
| Elm-ash-soft maple | | | | | | | | | | | | | | | |
| Sawtimber | 9,137 | -- | 14 | 116 | 163 | 239 | 779 | 288 | 241 | 1,312 | 693 | 1,494 | 2,419 | 1,220 | 159 |
| Poletimber | 19,056 | -- | 353 | 237 | 295 | 697 | 1,701 | 1,198 | 1,775 | 2,616 | 1,511 | 3,801 | 3,081 | 1,729 | 62 |
| Sapling & seedling | 4,837 | -94 | 191 | 399 | 518 | 887 | 1,228 | 455 | 437 | 387 | 331 | 14 | 84 | -- | -- |
| All stands | 33,030 | -94 | 558 | 752 | 976 | 1,823 | 3,708 | 1,941 | 2,453 | 4,315 | 2,535 | 5,309 | 5,584 | 2,949 | 221 |
| Maple-birch | | | | | | | | | | | | | | | |
| Sawtimber | 47,603 | -- | -- | 370 | 142 | 405 | 1,432 | 1,636 | 2,691 | 3,795 | 3,227 | 10,895 | 15,863 | 5,901 | 1,246 |
| Poletimber | 77,532 | -- | -- | 215 | 289 | 996 | 2,339 | 2,439 | 6,091 | 9,995 | 6,816 | 21,149 | 19,092 | 6,934 | 1,177 |
| Sapling & seedling | 13,952 | 84 | 1,049 | 835 | 1,050 | 1,764 | 2,545 | 1,400 | 1,885 | 1,439 | 666 | 915 | 128 | 192 | -- |
| All stands | 139,087 | 84 | 1,049 | 1,420 | 1,481 | 3,165 | 6,316 | 5,475 | 10,667 | 15,229 | 10,709 | 32,959 | 35,083 | 13,027 | 2,423 |
| Aspen | | | | | | | | | | | | | | | |
| Sawtimber | 13,758 | -- | 19 | 105 | 98 | 184 | 425 | 637 | 1,267 | 1,849 | 1,280 | 2,727 | 3,554 | 1,049 | 564 |
| Poletimber | 69,200 | -- | 487 | 329 | 484 | 2,508 | 5,290 | 4,882 | 5,920 | 9,766 | 7,996 | 13,707 | 13,102 | 4,089 | 640 |
| Sapling & seedling | 27,487 | 2,193 | 1,291 | 2,638 | 3,740 | 5,050 | 4,708 | 2,201 | 2,552 | 1,896 | 822 | 324 | 22 | 50 | -- |
| All stands | 110,445 | 2,193 | 1,797 | 3,072 | 4,322 | 7,742 | 10,423 | 7,720 | 9,739 | 13,511 | 10,098 | 16,758 | 16,678 | 5,188 | 1,204 |
| Paper birch | | | | | | | | | | | | | | | |
| Sawtimber | 2,646 | -- | -- | 14 | -- | 212 | 67 | 276 | 316 | 276 | 131 | 522 | 535 | 179 | 118 |
| Poletimber | 17,601 | -- | -- | 52 | 158 | 527 | 923 | 337 | 1,134 | 1,316 | 1,030 | 4,016 | 5,853 | 2,015 | 240 |
| Sapling & seedling | 3,928 | -20 | 192 | 340 | 207 | 745 | 865 | 231 | 167 | 315 | 412 | 363 | 111 | -- | -- |
| All stands | 24,175 | -20 | 192 | 406 | 365 | 1,484 | 1,855 | 844 | 1,617 | 1,907 | 1,573 | 4,901 | 6,499 | 2,194 | 358 |
| Exotic | | | | | | | | | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | 38 | -- | -- | -- | -- | -- | -- | -- | 38 | -- | -- | -- | -- | -- | -- |
| All stands | 38 | -- | -- | -- | -- | -- | -- | -- | 38 | -- | -- | -- | -- | -- | -- |
| Nonstocked | 358 | 85 | 6 | 17 | 11 | 31 | 72 | 35 | 9 | -- | 29 | 16 | 47 | -- | -- |
| All types | | | | | | | | | | | | | | | |
| Sawtimber | 142,083 | -- | 120 | 840 | 1,061 | 2,564 | 4,720 | 5,563 | 9,450 | 14,649 | 10,326 | 33,607 | 37,875 | 15,711 | 5,597 |
| Poletimber | 276,949 | -- | 851 | 894 | 1,636 | 6,009 | 12,572 | 13,082 | 21,603 | 35,254 | 27,433 | 61,203 | 59,291 | 25,832 | 11,289 |
| Sapling & seedling | 71,846 | 2,307 | 3,368 | 5,934 | 7,046 | 10,875 | 12,227 | 6,726 | 10,121 | 5,513 | 3,069 | 2,939 | 1,220 | 501 | -- |
| Nonstocked | 358 | 85 | 6 | 17 | 11 | 31 | 72 | 35 | 9 | -- | 29 | 16 | 47 | -- | -- |
| All stands | 491,236 | 2,392 | 4,345 | 7,685 | 9,754 | 19,479 | 29,591 | 25,406 | 41,183 | 55,416 | 40,857 | 97,765 | 98,433 | 42,044 | 16,886 |

Table 52.--Net annual growth of sawtimber on commercial forest land by forest type, stand-size class, and basal-area class, Wisconsin, 1982

(In thousand board feet)[1]

| Forest type and stand-size class | All classes | Basal area class (square feet per acre) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| Jack pine | | | | | | | | | | | | | | | |
| Sawtimber | 22,077 | -- | -- | -- | 1,314 | 233 | 2,089 | 3,595 | 3,171 | 3,051 | 1,934 | 4,552 | 1,698 | 440 | -- |
| Poletimber | 28,075 | -- | -- | -- | 104 | 805 | 2,033 | 2,213 | 2,033 | 5,311 | 7,035 | 6,668 | 1,571 | -- | 302 |
| Sapling & seedling | 5,681 | 47 | 69 | 57 | 685 | 1,396 | 660 | 917 | 1,757 | 93 | -- | -- | -- | -- | -- |
| All stands | 55,833 | 47 | 69 | 57 | 2,103 | 2,434 | 4,782 | 6,725 | 6,961 | 8,455 | 8,969 | 11,220 | 3,269 | 440 | 302 |
| Red pine | | | | | | | | | | | | | | | |
| Sawtimber | 73,238 | -- | -- | -- | 470 | 501 | 471 | -- | 4,053 | 3,609 | 9,889 | 21,785 | 17,370 | 13,029 | 2,061 |
| Poletimber | 32,612 | -- | -- | -- | -- | 53 | 465 | 600 | 43 | 2,855 | 219 | 6,618 | 12,819 | 1,921 | 7,019 |
| Sapling & seedling | 3,113 | 75 | 38 | -- | 898 | 342 | 429 | -- | 428 | 336 | -- | 500 | 67 | -- | -- |
| All stands | 108,963 | 75 | 38 | -- | 1,368 | 896 | 1,365 | 600 | 4,524 | 6,800 | 10,108 | 28,903 | 30,256 | 14,950 | 9,080 |
| White pine | | | | | | | | | | | | | | | |
| Sawtimber | 40,062 | -- | 240 | 80 | 1,538 | 223 | 915 | 413 | 1,452 | 3,043 | 1,788 | 11,867 | 9,569 | 5,666 | 3,268 |
| Poletimber | 4,709 | -- | -- | -- | -- | -- | 133 | -- | 583 | 518 | 272 | 592 | 1,944 | 667 | -- |
| Sapling & seedling | 927 | -- | -- | -- | -- | -- | 578 | -- | 349 | -- | -- | -- | -- | -- | -- |
| All stands | 45,698 | -- | 240 | 80 | 1,538 | 223 | 1,626 | 413 | 2,384 | 3,561 | 2,060 | 12,459 | 11,513 | 6,333 | 3,268 |
| Balsam fir | | | | | | | | | | | | | | | |
| Sawtimber | 20,490 | -- | -- | -- | -- | 1,977 | 3,444 | 740 | 902 | 1,590 | 1,025 | 3,282 | 6,371 | 604 | 555 |
| Poletimber | 21,982 | -- | -- | 86 | -- | 55 | 970 | 206 | 427 | 3,267 | 1,595 | 1,235 | 10,347 | 2,832 | 962 |
| Sapling & seedling | 3,914 | 226 | 34 | 426 | 201 | 1,053 | -8 | 618 | 648 | 104 | 297 | 106 | 8 | 201 | -- |
| All stands | 46,386 | 226 | 34 | 512 | 201 | 3,085 | 4,406 | 1,564 | 1,977 | 4,961 | 2,917 | 4,623 | 16,726 | 3,637 | 1,517 |
| White spruce | | | | | | | | | | | | | | | |
| Sawtimber | 13,153 | -- | -- | -- | -- | -- | -- | 718 | -- | -- | -- | -- | -- | 5,811 | 6,624 |
| Poletimber | 3,098 | -- | -- | -- | -- | -- | -- | -- | -- | 346 | 196 | 94 | 1,883 | 579 | -- |
| Sapling & seedling | 233 | -- | -- | -- | -- | 46 | 187 | -- | -- | -- | -- | -- | -- | -- | -- |
| All stands | 16,484 | -- | -- | -- | -- | 46 | 187 | 718 | -- | 346 | 196 | 94 | 1,883 | 6,390 | 6,624 |
| Black spruce | | | | | | | | | | | | | | | |
| Sawtimber | 490 | -- | 34 | -- | -- | -- | -- | 141 | -- | -- | -- | -- | 315 | -- | -- |
| Poletimber | 7,557 | -- | -- | 38 | -- | -- | 157 | 643 | 206 | 338 | 4,396 | 512 | 1,267 | -- | -- |
| Sapling & seedling | 829 | -- | -- | 45 | -- | 251 | 155 | 8 | 18 | 352 | -- | -- | -- | -- | -- |
| All stands | 8,876 | -- | 34 | 83 | -- | 251 | 312 | 792 | 224 | 690 | 4,396 | 512 | 1,582 | -- | -- |
| Northern white-cedar | | | | | | | | | | | | | | | |
| Sawtimber | 14,221 | -- | -- | -- | -- | 233 | -7 | 432 | 684 | 187 | 236 | 1,086 | 4,764 | 3,857 | 2,749 |
| Poletimber | 14,628 | -- | -- | -- | -- | -- | 479 | -- | 326 | 410 | 101 | 6,758 | 630 | 4,443 | 1,481 |
| Sapling & seedling | 629 | -- | -- | 143 | 12 | 110 | 7 | -- | 94 | 90 | -- | 50 | -- | 123 | -- |
| All stands | 29,478 | -- | -- | 143 | 12 | 343 | 479 | 432 | 1,104 | 687 | 337 | 7,894 | 5,394 | 8,423 | 4,230 |

(Table 52 continued on next page)

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[1] International 1/4-inch rule.

(Table 52 continued)

| Forest type and stand-size class | All classes | Basal area class (square feet per acre) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-120 | 121-150 | 151-180 | 181+ |
| Tamarack | | | | | | | | | | | | | | | |
| Sawtimber | 1,116 | -- | 68 | 244 | -- | 133 | 159 | 97 | -- | -- | -- | 415 | -- | -- | -- |
| Poletimber | 3,115 | -- | 100 | 22 | -- | 399 | 283 | 247 | 266 | 703 | 382 | 742 | -29 | -- | -- |
| Sapling & seedling | 875 | 11 | 14 | 63 | 102 | 295 | 140 | 117 | 1 | 60 | 72 | -- | -- | -- | -- |
| All stands | 5,106 | 11 | 182 | 329 | 102 | 827 | 582 | 461 | 267 | 763 | 454 | 1,157 | -29 | -- | -- |
| Oak-hickory | | | | | | | | | | | | | | | |
| Sawtimber | 195,961 | -- | -167 | 866 | 1,948 | 5,076 | 5,729 | 13,473 | 21,738 | 24,204 | 17,326 | 54,114 | 39,292 | 10,625 | 1,737 |
| Poletimber | 63,344 | -- | -- | 37 | 519 | 140 | 3,460 | 2,451 | 5,828 | 8,652 | 8,508 | 16,669 | 11,039 | 4,992 | 1,049 |
| Sapling & seedling | 21,014 | 284 | 1,194 | 3,497 | 4,580 | 2,344 | 4,588 | 1,440 | 953 | 734 | 305 | 789 | 306 | -- | -- |
| All stands | 280,319 | 284 | 1,027 | 4,400 | 7,047 | 7,560 | 13,777 | 17,364 | 28,519 | 33,590 | 26,139 | 71,572 | 50,637 | 15,617 | 2,786 |
| Elm-ash-soft maple | | | | | | | | | | | | | | | |
| Sawtimber | 51,442 | -- | 15 | 392 | 569 | 1,779 | 4,048 | 2,760 | 2,348 | 4,964 | 4,835 | 8,557 | 14,701 | 5,557 | 917 |
| Poletimber | 32,586 | -- | -72 | 278 | 500 | 313 | 2,160 | 3,957 | 3,827 | 6,069 | 2,692 | 5,396 | 5,150 | 1,960 | 356 |
| Sapling & seedling | 14,569 | 110 | 1,435 | 985 | 3,415 | 2,048 | 2,180 | 532 | 1,192 | 217 | 1,305 | 945 | 205 | -- | -- |
| All stands | 98,597 | 110 | 1,378 | 1,655 | 4,484 | 4,140 | 8,388 | 7,249 | 7,367 | 11,250 | 8,832 | 14,898 | 20,056 | 7,517 | 1,273 |
| Maple-birch | | | | | | | | | | | | | | | |
| Sawtimber | 238,197 | -- | -- | 1,195 | 601 | 3,267 | 5,546 | 8,243 | 12,935 | 21,855 | 19,481 | 56,862 | 77,016 | 25,632 | 5,564 |
| Poletimber | 160,178 | -- | -- | 303 | 505 | 754 | 6,437 | 4,565 | 9,765 | 21,390 | 15,459 | 42,297 | 45,151 | 11,624 | 1,928 |
| Sapling & seedling | 31,615 | 161 | 1,949 | 2,352 | 2,397 | 6,242 | 5,958 | 2,067 | 1,687 | 3,164 | 1,867 | 3,068 | 364 | 339 | -- |
| All stands | 429,990 | 161 | 1,949 | 3,850 | 3,503 | 10,263 | 17,941 | 14,875 | 24,387 | 46,409 | 36,807 | 102,227 | 122,531 | 37,595 | 7,492 |
| Aspen | | | | | | | | | | | | | | | |
| Sawtimber | 80,087 | -- | 79 | 903 | 1,371 | 1,640 | 5,077 | 4,426 | 6,712 | 14,158 | 6,839 | 14,522 | 17,671 | 3,687 | 3,002 |
| Poletimber | 134,742 | -- | 93 | 652 | 1,304 | 4,573 | 8,472 | 9,174 | 15,596 | 22,219 | 13,548 | 25,339 | 27,395 | 4,815 | 1,562 |
| Sapling & seedling | 52,783 | 6,701 | 6,339 | 7,612 | 5,653 | 9,074 | 5,504 | 4,319 | 5,112 | 1,006 | 644 | 803 | 16 | -- | -- |
| All stands | 267,612 | 6,701 | 6,511 | 9,167 | 8,328 | 15,287 | 19,053 | 17,919 | 27,420 | 37,383 | 21,031 | 40,664 | 45,082 | 8,502 | 4,564 |
| Paper birch | | | | | | | | | | | | | | | |
| Sawtimber | 12,247 | -- | -- | 97 | -- | 354 | 342 | 1,626 | 731 | 1,312 | 563 | 2,748 | 2,456 | 1,294 | 724 |
| Poletimber | 31,789 | -- | -- | -- | 278 | 732 | 918 | 682 | 2,422 | 2,966 | 1,846 | 6,728 | 10,331 | 4,249 | 637 |
| Sapling & seedling | 3,896 | 675 | -43 | 549 | 715 | 361 | 537 | 474 | 34 | 456 | 11 | 127 | -- | -- | -- |
| All stands | 47,932 | 675 | -43 | 646 | 993 | 1,447 | 1,797 | 2,782 | 3,187 | 4,734 | 2,420 | 9,603 | 12,787 | 5,543 | 1,361 |
| Exotic | | | | | | | | | | | | | | | |
| Sawtimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Poletimber | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sapling & seedling | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| All stands | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Nonstocked | 1,745 | 845 | 281 | 75 | 434 | 22 | -57 | 88 | 66 | -- | -9 | -- | -- | -- | -- |
| All types | | | | | | | | | | | | | | | |
| Sawtimber | 762,781 | -- | 269 | 3,777 | 7,811 | 15,416 | 27,813 | 36,664 | 54,726 | 77,973 | 63,916 | 179,790 | 191,223 | 76,202 | 27,201 |
| Poletimber | 538,415 | -- | 121 | 1,416 | 3,210 | 7,824 | 25,967 | 24,738 | 41,322 | 75,044 | 56,249 | 119,648 | 129,498 | 38,082 | 15,296 |
| Sapling & seedling | 140,078 | 8,290 | 11,029 | 15,729 | 18,658 | 23,562 | 20,915 | 10,492 | 12,273 | 6,612 | 4,501 | 6,388 | 966 | 663 | -- |
| Nonstocked | 1,745 | 845 | 281 | 75 | 434 | 22 | -57 | 88 | 66 | -- | -9 | -- | -- | -- | -- |
| All stands | 1,443,019 | 9,135 | 11,700 | 20,997 | 30,113 | 46,824 | 74,638 | 71,982 | 108,387 | 159,629 | 124,657 | 305,826 | 321,687 | 114,947 | 42,497 |

Table 53.--Timber removals from growing stock on commercial forest land by species group and Forest Survey Unit, Wisconsin, 1982

(In thousand cubic feet)

| Species group | All Units | Forest Survey Unit | | | | |
|---|---|---|---|---|---|---|
| | | Northeast | Northwest | Central | Southwest | Southeast |
| Softwoods | | | | | | |
| Jack pine | 14,552 | 3,216 | 6,263 | 4,740 | 315 | 18 |
| Red pine | 16,502 | 5,143 | 4,150 | 5,405 | 1,648 | 156 |
| White pine | 7,967 | 3,073 | 2,104 | 2,454 | 230 | 106 |
| White spruce | 1,976 | 1,235 | 741 | -- | -- | [1] |
| Black spruce | 1,235 | 875 | 323 | 37 | -- | -- |
| Balsam fir | 9,351 | 6,388 | 2,921 | 41 | -- | 1 |
| Hemlock | 4,839 | 3,871 | 743 | 189 | -- | 36 |
| Tamarack | 545 | 125 | 323 | 96 | -- | 1 |
| Northern white-cedar | 2,421 | 834 | 1,018 | 29 | -- | 540 |
| Other softwoods | -- | -- | -- | -- | -- | -- |
| Total | 59,388 | 24,760 | 18,586 | 12,991 | 2,193 | 858 |
| Hardwoods | | | | | | |
| White oak | 10,025 | 230 | 1,118 | 3,387 | 3,972 | 1,318 |
| Select red oak | 28,156 | 3,416 | 5,451 | 7,635 | 10,627 | 1,027 |
| Other red oak | 11,211 | 557 | 535 | 4,381 | 4,981 | 757 |
| Hickory | 644 | 164 | 65 | 111 | 231 | 73 |
| Basswood | 7,199 | 2,668 | 1,957 | 1,061 | 1,293 | 220 |
| Beech | 321 | 225 | -- | 17 | -- | 79 |
| Yellow birch | 3,027 | 1,449 | 1,191 | 307 | 39 | 41 |
| Hard maple | 21,064 | 10,085 | 6,877 | 2,371 | 1,234 | 497 |
| Soft maple | 10,322 | 3,879 | 2,664 | 1,845 | 1,208 | 726 |
| Elm | 15,600 | 5,894 | 5,158 | 2,257 | 1,729 | 562 |
| Ash | 6,675 | 1,586 | 2,703 | 1,312 | 411 | 663 |
| Cottonwood | 120 | 13 | -- | 3 | 85 | 19 |
| Balsam poplar | 148 | 90 | 47 | -- | -- | 11 |
| Bigtooth aspen | 22,002 | 8,296 | 9,682 | 2,638 | 1,229 | 157 |
| Quaking aspen | 74,114 | 32,353 | 34,064 | 6,750 | 566 | 381 |
| Paper birch | 13,333 | 6,710 | 5,134 | 937 | 287 | 265 |
| Black walnut | 134 | -- | -- | -- | 99 | 35 |
| Other hardwoods[2] | 1,475 | 321 | 171 | 152 | 438 | 393 |
| Total | 225,570 | 77,936 | 76,817 | 35,164 | 28,429 | 7,224 |
| All species | 284,958 | 102,696 | 95,403 | 48,155 | 30,622 | 8,082 |

[1] Less than 500 cubic feet.

[2] Includes willow, hackberry, river birch, black cherry and butternut.

## Table 54.--Timber removals from sawtimber on commercial forest land by species group and Forest Survey Unit, Wisconsin, 1982

(In thousand board feet)[1]

| Species group | All Units | Forest Survey Unit | | | | |
|---|---|---|---|---|---|---|
| | | Northeast | Northwest | Central | Southwest | Southeast |
| Softwoods | | | | | | |
| Jack pine | 20,320 | 4,581 | 9,315 | 6,070 | 354 | -- |
| Red pine | 35,981 | 13,098 | 12,770 | 8,634 | 1,464 | 15 |
| White pine | 36,240 | 14,046 | 9,788 | 11,064 | 854 | 488 |
| White spruce | 5,155 | 2,497 | 2,656 | -- | -- | 2 |
| Black spruce | 884 | 730 | 154 | -- | -- | -- |
| Balsam fir | 17,602 | 10,778 | 6,753 | 68 | -- | 3 |
| Hemlock | 12,433 | 10,764 | 643 | 850 | -- | 176 |
| Tamarack | 654 | 174 | 386 | 90 | -- | 4 |
| Northern white-cedar | 4,383 | 2,043 | 1,293 | 123 | -- | 924 |
| Other softwoods | -- | -- | -- | -- | -- | -- |
| Total | 133,652 | 58,711 | 43,758 | 26,899 | 2,672 | 1,612 |
| Hardwoods | | | | | | |
| White oak | 41,499 | 793 | 3,934 | 13,363 | 18,124 | 5,285 |
| Select red oak | 120,169 | 12,002 | 20,781 | 33,359 | 49,484 | 4,543 |
| Other red oak | 43,856 | 2,049 | 2,243 | 15,930 | 21,004 | 2,630 |
| Hickory | 2,294 | 477 | 178 | 420 | 1,027 | 192 |
| Basswood | 25,798 | 8,337 | 7,003 | 4,366 | 5,216 | 876 |
| Beech | 1,312 | 932 | -- | 80 | -- | 300 |
| Yellow birch | 8,206 | 5,004 | 2,431 | 664 | 2 | 105 |
| Hard maple | 75,889 | 37,084 | 21,711 | 9,249 | 6,206 | 1,639 |
| Soft maple | 28,684 | 9,750 | 6,226 | 6,153 | 3,545 | 3,010 |
| Elm | 52,498 | 21,501 | 16,307 | 6,275 | 6,436 | 1,979 |
| Ash | 16,991 | 4,028 | 4,964 | 3,879 | 1,875 | 2,245 |
| Cottonwood | 568 | 57 | -- | 18 | 406 | 87 |
| Balsam poplar | 306 | 218 | 51 | -- | -- | 37 |
| Bigtooth aspen | 70,020 | 24,430 | 30,821 | 9,960 | 4,032 | 777 |
| Quaking aspen | 183,661 | 81,457 | 83,522 | 16,082 | 1,804 | 796 |
| Paper birch | 16,907 | 9,109 | 5,413 | 1,314 | 495 | 576 |
| Black walnut | 519 | -- | -- | -- | 338 | 181 |
| Other hardwoods[2] | 3,498 | 654 | 225 | 375 | 1,245 | 999 |
| Total | 692,675 | 217,882 | 205,810 | 121,487 | 121,239 | 26,257 |
| All species | 826,327 | 276,593 | 249,568 | 148,386 | 123,911 | 27,869 |

[1] International 1/4-inch rule.

[2] Includes willow, hackberry, river birch, black cherry and butternut.

Table 55.--Average annual timber removals from growing stock on commercial forest land by species group and county, Wisconsin, 1967-1982[1]

(In thousand cubic feet)

| Species group | All Units | Total Northeast Unit | Northeast Unit | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Florence | Forest | Langlade | Lincoln | Menominee | Marinette | Oconto | Oneida | Shawano | Vilas |
| Softwoods | | | | | | | | | | | | |
| Jack pine | 18,173 | 8,684 | 925 | 3,369 | 240 | -- | -- | 935 | 1,394 | 1,302 | -- | 519 |
| Red pine | 5,156 | 3,756 | 72 | 847 | 111 | 383 | -- | 160 | 109 | 1,848 | -- | 226 |
| White pine | 5,382 | 2,777 | 82 | 468 | -- | -- | 965 | 123 | 126 | 641 | 192 | 180 |
| White spruce | 1,975 | 1,115 | 226 | 615 | 75 | -- | -- | 92 | -- | 107 | -- | -- |
| Black spruce | 1,070 | 484 | 48 | 53 | -- | -- | -- | 86 | -- | 279 | -- | 18 |
| Balsam fir | 9,101 | 5,092 | 98 | 1,302 | 435 | 208 | -- | 1,115 | 70 | 1,565 | 26 | 273 |
| Hemlock | 4,840 | 2,819 | 145 | 220 | 67 | 99 | 532 | -- | 96 | 737 | 12 | 911 |
| Tamarack | 1,159 | 107 | 48 | -- | -- | -- | -- | 22 | -- | -- | 37 | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 2,854 | 1,825 | 145 | -- | 203 | -- | -- | 491 | 27 | 108 | 851 | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 49,710 | 26,659 | 1,789 | 6,874 | 1,131 | 690 | 1,497 | 3,024 | 1,822 | 6,587 | 1,118 | 2,127 |
| Hardwoods | | | | | | | | | | | | |
| White oak | 5,369 | 79 | -- | -- | -- | -- | 41 | -- | -- | -- | 38 | -- |
| Select red oak | 21,046 | 1,995 | 57 | 67 | 39 | -- | 323 | 579 | 36 | 249 | 365 | 280 |
| Other red oak | 5,890 | 623 | -- | -- | -- | -- | -- | 395 | -- | -- | 228 | -- |
| Select hickory | 237 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | 251 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 8,083 | 3,083 | 331 | 910 | 290 | 1,058 | 148 | 160 | 37 | 149 | -- | -- |
| Beech | 45 | 45 | -- | -- | -- | -- | 45 | -- | -- | -- | -- | -- |
| Yellow birch | 3,560 | 1,486 | 588 | 309 | 302 | 24 | 170 | -- | -- | -- | 93 | -- |
| Hard maple | 14,463 | 5,324 | 949 | 1,976 | 602 | 926 | 108 | 111 | 113 | 150 | 203 | 186 |
| Soft maple | 10,043 | 2,165 | -- | 59 | 50 | 491 | 159 | 783 | 400 | 97 | 32 | 94 |
| Elm | 17,949 | 5,796 | 1,138 | 1,132 | 1,147 | 395 | 1,057 | 151 | 162 | 51 | 563 | -- |
| Black ash | 2,893 | 518 | -- | 79 | 86 | 107 | 93 | 104 | -- | -- | 49 | -- |
| White & green ash | 3,091 | 725 | -- | -- | 45 | 130 | 50 | -- | 327 | 36 | 137 | -- |
| Cottonwood | 129 | 56 | -- | -- | -- | -- | -- | -- | 56 | -- | -- | -- |
| Willow | 178 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | 51 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 218 | 191 | 88 | 37 | -- | -- | -- | 66 | -- | -- | -- | -- |
| Bigtooth aspen | 17,407 | 6,644 | -- | -- | 398 | -- | 706 | 3,191 | 823 | 258 | -- | 1,268 |
| Quaking aspen | 46,327 | 18,832 | 2,575 | 2,100 | 2,206 | 1,669 | 189 | 4,303 | 1,490 | 2,715 | 68 | 1,517 |
| Paper birch | 12,543 | 6,452 | 191 | 430 | 511 | 412 | 218 | 1,477 | 431 | 1,417 | 315 | 1,050 |
| River birch | 213 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 700 | 322 | -- | 97 | 94 | -- | -- | -- | 37 | 41 | 53 | -- |
| Black walnut | 71 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 139 | 68 | -- | -- | -- | -- | -- | 68 | -- | -- | -- | -- |
| Other hardwoods | 8 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 170,904 | 54,404 | 5,917 | 7,196 | 5,770 | 5,212 | 3,307 | 11,388 | 3,912 | 5,163 | 2,144 | 4,395 |
| All species | 220,614 | 81,063 | 7,706 | 14,070 | 6,901 | 5,902 | 4,804 | 14,412 | 5,734 | 11,750 | 3,262 | 6,522 |

(Table 55 continued on next page)

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[1] The corrected volumes shown in this table supercede the volumes reported in Research Bulletins NC-73, NC-78, NC-84, NC-86, and NC-87.

(Table 55 continued)

| Species group | Total Northwest Unit | Northwest Unit: Ashland | Barron | Bayfield | Burnett | Douglas | Iron | Polk | Price | Rusk | Sawyer | Taylor | Washburn |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | | | | | | |
| Jack pine | 6,209 | -- | -- | 1,072 | 1,963 | 1,891 | -- | 466 | 12 | -- | 474 | -- | 331 |
| Red pine | 314 | -- | -- | 161 | -- | -- | 90 | -- | -- | -- | -- | -- | 63 |
| White pine | 1,084 | -- | -- | 256 | 77 | 44 | -- | 229 | -- | -- | 478 | -- | -- |
| White spruce | 860 | 552 | -- | 137 | -- | -- | 103 | -- | -- | -- | -- | 38 | 30 |
| Black spruce | 586 | 227 | -- | -- | -- | 195 | 54 | -- | -- | -- | 15 | -- | 95 |
| Balsam fir | 3,911 | 1,496 | -- | 19 | -- | 430 | 217 | -- | 131 | 40 | 1,260 | 318 | -- |
| Hemlock | 1,801 | 237 | -- | -- | -- | -- | 832 | -- | -- | -- | 526 | 206 | -- |
| Tamarack | 1,009 | -- | 121 | -- | -- | 346 | -- | -- | 394 | -- | -- | -- | 148 |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 527 | -- | -- | -- | 66 | -- | 53 | -- | 408 | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 16,301 | 2,512 | 121 | 1,645 | 2,106 | 2,906 | 1,349 | 695 | 945 | 40 | 2,753 | 562 | 667 |
| Hardwoods | | | | | | | | | | | | | |
| White oak | 445 | -- | 93 | -- | 57 | -- | -- | 273 | -- | -- | -- | -- | 22 |
| Select red oak | 4,137 | -- | 963 | 992 | 281 | 43 | -- | 1,262 | 53 | 258 | 31 | -- | 254 |
| Other red oak | 267 | -- | 195 | -- | 72 | -- | -- | -- | -- | -- | -- | -- | -- |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 2,572 | 225 | 110 | 251 | 46 | 14 | -- | 144 | 1,013 | 222 | 73 | 474 | -- |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | 1,164 | -- | -- | 46 | -- | -- | 403 | -- | 204 | 197 | 134 | 180 | -- |
| Hard maple | 5,369 | 1,364 | 286 | 691 | -- | -- | 83 | 121 | 1,340 | 916 | 182 | 386 | -- |
| Soft maple | 3,223 | 306 | 238 | 1,135 | 46 | 69 | 76 | 107 | 146 | 140 | 152 | 762 | 46 |
| Elm | 4,056 | 841 | -- | 50 | 135 | 112 | 73 | 190 | 911 | 876 | 38 | 830 | -- |
| Black ash | 1,527 | 42 | -- | 647 | 181 | 134 | -- | -- | 92 | 431 | -- | -- | -- |
| White & green ash | 799 | 186 | -- | 118 | 64 | -- | -- | -- | 152 | 146 | 35 | 98 | -- |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 27 | -- | -- | 27 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | 8,144 | 137 | 94 | 2,854 | 1,275 | 1,195 | 304 | 342 | 163 | -- | 892 | 60 | 828 |
| Quaking aspen | 19,796 | 3,077 | 529 | 3,352 | 1,189 | 1,727 | 1,921 | 798 | 1,371 | 188 | 1,845 | 1,664 | 2,135 |
| Paper birch | 4,776 | 518 | -- | 1,794 | 73 | 431 | 366 | 81 | 363 | 416 | 400 | 134 | 200 |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 113 | -- | -- | -- | -- | -- | -- | -- | 56 | -- | 40 | 17 | -- |
| Black walnut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 56,415 | 6,696 | 2,508 | 11,957 | 3,419 | 3,725 | 3,226 | 3,318 | 5,864 | 3,790 | 3,822 | 4,605 | 3,485 |
| All species | 72,716 | 9,208 | 2,629 | 13,602 | 5,525 | 6,631 | 4,575 | 4,013 | 6,809 | 3,830 | 6,575 | 5,167 | 4,152 |

(Table 55 continued on next page)

(Table 55 continued)

| Species group | Total Central Unit | Adams | Chippewa | Clark | Eau Claire | Jackson | Juneau | Marathon | Marquette | Monroe | Portage | Waupaca | Waushara | Wood |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Central Unit | | | | | | | | | | | | |
| Softwoods | | | | | | | | | | | | | | |
| Jack pine | 3,280 | 976 | -- | 229 | 301 | 697 | 450 | 29 | -- | 476 | -- | -- | -- | 122 |
| Red pine | 1,086 | 81 | 68 | -- | -- | -- | -- | 437 | 292 | -- | 175 | -- | -- | 33 |
| White pine | 1,514 | -- | -- | -- | -- | -- | -- | 175 | 460 | -- | 411 | 265 | 106 | 97 |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | 63 | -- | -- | -- | -- | -- | -- | 63 | -- | -- | -- | -- | -- | -- |
| Hemlock | 220 | -- | -- | -- | -- | -- | -- | 220 | -- | -- | -- | -- | -- | -- |
| Tamarack | 43 | -- | 43 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 6,206 | 1,057 | 111 | 229 | 301 | 697 | 450 | 924 | 752 | 476 | 586 | 265 | 106 | 252 |
| Hardwoods | | | | | | | | | | | | | | |
| White oak | 1,145 | 122 | -- | 417 | 142 | -- | -- | -- | -- | 29 | 54 | 304 | -- | 77 |
| Select red oak | 2,811 | -- | 361 | 375 | 670 | 94 | -- | 113 | -- | 383 | 114 | 574 | -- | 127 |
| Other red oak | 1,584 | 537 | -- | -- | 91 | 68 | 378 | -- | -- | 53 | 214 | -- | 64 | 179 |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | 44 | -- | -- | -- | -- | -- | -- | 44 | -- | -- | -- | -- | -- | -- |
| Basswood | 1,164 | -- | 449 | 148 | -- | -- | -- | 290 | -- | -- | -- | -- | -- | 277 |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | 866 | -- | 36 | -- | -- | -- | -- | 678 | -- | -- | -- | 51 | -- | 101 |
| Hard maple | 1,620 | -- | 95 | 197 | -- | -- | -- | 926 | -- | -- | -- | 284 | -- | 118 |
| Soft maple | 1,240 | -- | 142 | 55 | -- | 29 | -- | 260 | -- | 31 | 249 | 341 | -- | 133 |
| Elm | 4,558 | -- | 159 | 832 | -- | -- | -- | 2,670 | -- | -- | 24 | 485 | -- | 388 |
| Black ash | 524 | -- | 372 | 42 | -- | -- | -- | -- | 33 | -- | -- | -- | -- | 77 |
| White & green ash | 612 | -- | 52 | -- | 36 | -- | -- | 391 | -- | -- | 29 | -- | -- | 104 |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | 1,111 | 53 | 150 | 65 | 81 | 60 | 83 | 136 | -- | 129 | -- | 137 | -- | 217 |
| Quaking aspen | 7,486 | 136 | 1,808 | 1,398 | 478 | 65 | 75 | 2,164 | -- | -- | 316 | -- | -- | 1,046 |
| Paper birch | 969 | -- | -- | 137 | -- | -- | -- | 661 | -- | -- | -- | -- | -- | 171 |
| River birch | 30 | -- | -- | -- | -- | 30 | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black walnut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 25,764 | 848 | 3,624 | 3,666 | 1,498 | 346 | 536 | 8,333 | 33 | 625 | 1,000 | 2,176 | 64 | 3,015 |
| All species | 31,970 | 1,905 | 3,735 | 3,895 | 1,799 | 1,043 | 986 | 9,257 | 785 | 1,101 | 1,586 | 2,441 | 170 | 3,267 |

(Table 55 continued on next page)

84

(Table 55 continued)

| Species group | Total Southwest Unit | Southwest Unit<br>Buffalo | Crawford | Dunn | Grant | Iowa | La Crosse | Lafayette | Pepin | Pierce | Richland | St.Croix | Sauk | Trempealeau | Vernon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | | | | | | | | |
| Jack pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Red pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hemlock | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hardwoods | | | | | | | | | | | | | | | |
| White oak | 2,586 | 78 | 45 | 73 | 353 | 154 | 56 | -- | 45 | 60 | 49 | -- | 987 | 439 | 247 |
| Select red oak | 10,176 | 1,479 | 299 | 568 | 432 | 86 | 1,091 | -- | 336 | 339 | -- | 126 | 4,612 | 300 | 508 |
| Other red oak | 2,646 | 545 | 268 | 587 | -- | -- | 171 | -- | -- | -- | -- | 204 | 328 | 316 | 227 |
| Select hickory | 126 | 73 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 43 | -- | 10 |
| Other hickory | 157 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 157 |
| Basswood | 1,255 | -- | -- | 232 | -- | -- | -- | -- | -- | 244 | 101 | 31 | 574 | -- | 73 |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | 44 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 44 | -- | -- |
| Hard maple | 1,329 | -- | -- | -- | 213 | -- | -- | -- | -- | 59 | -- | 921 | 136 | -- | -- |
| Soft maple | 1,310 | 400 | -- | 117 | -- | -- | 131 | -- | -- | -- | -- | -- | 300 | 362 | -- |
| Elm | 1,814 | 68 | -- | 108 | 268 | 227 | 167 | -- | -- | 130 | 283 | 281 | 139 | 101 | 42 |
| Black ash | 188 | -- | -- | -- | -- | -- | 188 | -- | -- | -- | -- | -- | -- | -- | -- |
| White & green ash | 312 | 30 | -- | -- | -- | 40 | -- | -- | -- | 53 | 54 | -- | -- | 75 | 60 |
| Cottonwood | 73 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 73 | -- | -- | -- | -- |
| Willow | 178 | 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 154 | -- |
| Hackberry | 51 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 51 | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | 1,508 | -- | -- | 89 | -- | -- | -- | -- | -- | -- | 214 | -- | 1,143 | -- | 62 |
| Quaking aspen | 86 | -- | -- | 86 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Paper birch | 211 | 163 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 48 | -- | -- | -- |
| River birch | 183 | 66 | -- | -- | -- | -- | 117 | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 54 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 31 | 23 |
| Black walnut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 71 | 71 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | 8 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8 |
| Total | 24,366 | 2,997 | 612 | 1,860 | 1,266 | 507 | 1,921 | -- | 381 | 885 | 825 | 1,611 | 8,306 | 1,778 | 1,417 |
| All species | 24,366 | 2,997 | 612 | 1,860 | 1,266 | 507 | 1,921 | -- | 381 | 885 | 825 | 1,611 | 8,306 | 1,778 | 1,417 |

(Table 55 continued on next page)

(Table 55 continued)

| Species group | Total Southeast Unit | Southeast Unit | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Brown | Calumet | Columbia | Dane | Dodge | Door | Fond du Lac | Green | Green Lake | Jefferson | Kenosha | Kewaunee | Manitowoc |
| Softwoods | | | | | | | | | | | | | | |
| Jack pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Red pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White pine | 7 | -- | -- | -- | -- | -- | 7 | -- | -- | -- | -- | -- | -- | -- |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | 35 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 35 | -- |
| Hemlock | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 502 | -- | -- | -- | -- | -- | 369 | -- | -- | -- | -- | -- | 133 | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 544 | -- | -- | -- | -- | -- | 376 | -- | -- | -- | -- | -- | 168 | -- |
| Hardwoods | | | | | | | | | | | | | | |
| White oak | 1,114 | -- | -- | 286 | 552 | -- | -- | -- | 74 | -- | 39 | -- | -- | -- |
| Select red oak | 1,927 | -- | -- | 642 | 412 | -- | -- | -- | 214 | 123 | -- | 38 | -- | -- |
| Other red oak | 770 | -- | -- | 435 | 295 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Select hickory | 111 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | 50 | -- | -- | -- | -- | 50 | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 9 | -- | -- |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hard maple | 821 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Soft maple | 2,105 | 867 | -- | -- | -- | -- | -- | 41 | -- | -- | 36 | -- | -- | 119 |
| Elm | 1,725 | 530 | -- | -- | -- | 23 | 81 | 41 | 438 | -- | -- | -- | 247 | -- |
| Black ash | 136 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 57 | -- | -- | 48 |
| White & green ash | 643 | -- | -- | -- | -- | -- | 196 | -- | -- | -- | -- | -- | -- | -- |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Quaking aspen | 127 | -- | -- | 26 | -- | -- | 101 | -- | -- | -- | -- | -- | -- | -- |
| Paper birch | 135 | -- | -- | 25 | -- | -- | 37 | -- | -- | -- | -- | -- | -- | -- |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 211 | -- | -- | 26 | 185 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black walnut | 71 | -- | -- | -- | -- | -- | -- | -- | 35 | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 9,955 | 1,397 | -- | 1,440 | 1,444 | 73 | 415 | 82 | 761 | 123 | 132 | 47 | 247 | 167 |
| All species | 10,499 | 1,397 | -- | 1,440 | 1,444 | 73 | 791 | 82 | 761 | 123 | 132 | 47 | 415 | 167 |

(Table 55 continued on next page)

(Table 55 continued)

| Species group | Southeast Unit |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  | Milwaukee | Outagamie | Ozaukee | Racine | Rock | Sheboygen | Walworth | Washington | Waukesha | Winnebago |
| Softwoods |  |  |  |  |  |  |  |  |  |  |
| Jack pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Red pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hemlock | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hardwoods |  |  |  |  |  |  |  |  |  |  |
| White oak | -- | 58 | -- | -- | -- | 40 | 65 | -- | -- | -- |
| Select red oak | -- | 199 | -- | -- | -- | 169 | -- | -- | 40 | 90 |
| Other red oak | -- | -- | -- | -- | -- | -- | -- | -- | 40 | -- |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | 111 | -- | -- |
| Other hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hard maple | -- | -- | -- | -- | -- | 295 | -- | 408 | -- | 118 |
| Soft maple | -- | 868 | -- | -- | -- | 153 | -- | -- | -- | 21 |
| Elm | -- | 224 | -- | -- | -- | -- | -- | 37 | -- | 104 |
| Black ash | -- | -- | -- | -- | -- | 31 | -- | -- | -- | -- |
| White & green ash | -- | 84 | -- | -- | -- | 363 | -- | -- | -- | -- |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Quaking aspen | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Paper birch | -- | 73 | -- | -- | -- | -- | -- | -- | -- | -- |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black walnut | -- | 36 | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | -- | 1,542 | -- | -- | -- | 1,051 | 65 | 556 | 80 | 333 |
| All species | -- | 1,542 | -- | -- | -- | 1,051 | 65 | 556 | 80 | 333 |

Table 56.--Average annual timber removals from sawtimber on commercial forest land by species group and county Wisconsin, 1968-1982[1]

(In thousand board feet)[2]

| Species group | All Units | Total Northeast Unit | Northeast Unit | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Florence | Forest | Langlade | Lincoln | Menominee | Marinette | Oconto | Oneida | Shawano | Vilas |
| Softwoods | | | | | | | | | | | | |
| Jack pine | 34,414 | 13,812 | 1,002 | 3,665 | 259 | -- | -- | 2,606 | 1,517 | 4,017 | -- | 746 |
| Red pine | 15,289 | 12,228 | 414 | 3,968 | 107 | 601 | -- | -- | 627 | 5,286 | -- | 1,225 |
| White pine | 27,661 | 14,338 | 500 | 2,472 | -- | -- | 5,373 | 685 | 666 | 2,700 | 972 | 970 |
| White spruce | 7,022 | 3,783 | 590 | 2,176 | 353 | -- | -- | 393 | -- | 271 | -- | -- |
| Black spruce | 1,438 | 470 | -- | -- | -- | -- | -- | -- | -- | 470 | -- | -- |
| Balsam fir | 19,673 | 10,201 | 272 | 2,275 | 810 | 298 | -- | 2,332 | 211 | 3,550 | -- | 453 |
| Hemlock | 21,638 | 12,214 | 677 | 856 | 287 | 474 | 2,487 | -- | 252 | 3,327 | -- | 3,854 |
| Tamarack | 2,835 | 128 | -- | -- | -- | -- | -- | 128 | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 4,767 | 3,443 | 93 | -- | 83 | -- | -- | 1,031 | -- | 355 | 1,881 | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 134,737 | 70,617 | 3,548 | 15,412 | 1,899 | 1,373 | 7,860 | 7,175 | 3,273 | 19,976 | 2,853 | 7,248 |
| Hardwoods | | | | | | | | | | | | |
| White oak | 21,920 | 380 | -- | -- | -- | -- | 197 | -- | -- | -- | 183 | -- |
| Select red oak | 90,266 | 8,387 | 276 | 329 | 190 | -- | 1,407 | 2,130 | 177 | 1,207 | 1,767 | 904 |
| Other red oak | 22,525 | 1,455 | -- | -- | -- | -- | -- | 390 | -- | -- | 1,065 | -- |
| Select hickory | 440 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | 500 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 28,081 | 8,488 | 1,160 | 3,400 | 501 | 1,982 | 728 | -- | 177 | 540 | -- | -- |
| Beech | 224 | 224 | -- | -- | -- | -- | 224 | -- | -- | -- | -- | -- |
| Yellow birch | 14,762 | 6,757 | 3,153 | 1,537 | 1,173 | -- | 894 | -- | -- | -- | -- | -- |
| Hard maple | 45,946 | 17,869 | 3,631 | 6,718 | 1,576 | 3,765 | 551 | -- | -- | -- | 1,020 | 608 |
| Soft maple | 23,916 | 3,439 | -- | 324 | 232 | 1,931 | 201 | 387 | 192 | -- | -- | 172 |
| Elm | 66,652 | 20,589 | 3,653 | 3,573 | 4,110 | 1,604 | 4,113 | 180 | 584 | 224 | 2,548 | -- |
| Black ash | 4,323 | 1,173 | -- | -- | -- | 594 | 579 | -- | -- | -- | -- | -- |
| White & green ash | 12,158 | 1,900 | -- | -- | 220 | 500 | -- | -- | 357 | 174 | 649 | -- |
| Cottonwood | 310 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | 442 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | 233 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 656 | 656 | 365 | -- | -- | -- | -- | 291 | -- | -- | -- | -- |
| Bigtooth aspen | 38,249 | 11,012 | -- | -- | 1,269 | -- | 1,124 | 4,147 | 2,318 | 305 | -- | 1,849 |
| Quaking aspen | 80,712 | 31,106 | 5,752 | 3,917 | 5,275 | 1,241 | -- | 3,184 | 3,555 | 4,004 | -- | 4,178 |
| Paper birch | 18,872 | 6,755 | -- | 1,055 | 873 | 344 | 407 | 1,688 | 252 | 1,587 | -- | 549 |
| River birch | 307 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 1,970 | 1,005 | -- | 233 | 302 | -- | -- | -- | 213 | -- | 257 | -- |
| Black walnut | 185 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 654 | 197 | -- | -- | -- | -- | -- | 197 | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 474,303 | 121,392 | 17,990 | 21,086 | 15,721 | 11,961 | 10,425 | 12,594 | 7,825 | 8,041 | 7,489 | 8,260 |
| All species | 609,040 | 192,009 | 21,538 | 36,498 | 17,620 | 13,334 | 18,285 | 19,769 | 11,098 | 28,017 | 10,342 | 15,508 |

(Table 56 continued on next page)

[1] The corrected volumes shown in this table supercede the volumes reported in Research Bulletins NC-73, NC-78, NC-84, NC-86, and NC-87.

[2] International 1/4-inch rule.

(Table 56 continued)

| Species group | Total Northwest Unit | Northwest Unit |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Ashland | Barron | Bayfield | Burnett | Douglas | Iron | Polk | Price | Rusk | Sawyer | Taylor | Washburn |
| Softwoods |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jack pine | 10,482 | -- | -- | 1,436 | 2,552 | 2,122 | -- | 1,541 | 63 | -- | 2,040 | -- | 728 |
| Red pine | 1,818 | -- | -- | 924 | -- | -- | 519 | -- | -- | -- | -- | -- | 375 |
| White pine | 5,752 | -- | -- | 1,408 | 412 | -- | -- | 1,350 | -- | -- | 2,582 | -- | -- |
| White spruce | 3,239 | 1,624 | -- | 740 | -- | -- | 525 | -- | -- | -- | -- | 201 | 149 |
| Black spruce | 968 | 809 | -- | -- | -- | 159 | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | 9,472 | 3,260 | -- | -- | -- | 1,558 | 208 | -- | 258 | -- | 3,892 | 296 | -- |
| Hemlock | 8,392 | 1,065 | -- | -- | -- | -- | 4,024 | -- | -- | -- | 2,432 | 871 | -- |
| Tamarack | 2,707 | -- | 657 | -- | -- | 593 | -- | -- | 1,297 | -- | -- | -- | 160 |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 1,019 | -- | -- | -- | 273 | -- | 279 | -- | 467 | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 43,849 | 6,758 | 657 | 4,508 | 3,237 | 4,432 | 5,555 | 2,891 | 2,085 | -- | 10,946 | 1,368 | 1,412 |
| Hardwoods |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White oak | 937 | -- | 304 | -- | 167 | -- | -- | 466 | -- | -- | -- | -- | -- |
| Select red oak | 11,528 | -- | 2,974 | 2,019 | 190 | -- | -- | 4,965 | 258 | 909 | -- | -- | 213 |
| Other red oak | 1,206 | -- | 929 | -- | 277 | -- | -- | -- | -- | -- | -- | -- | -- |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 8,145 | 825 | -- | 1,218 | 169 | -- | -- | 721 | 2,646 | 1,079 | 168 | 1,319 | -- |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | 4,432 | -- | -- | 215 | -- | -- | 2,041 | -- | 324 | 958 | 535 | 359 | -- |
| Hard maple | 12,029 | 3,496 | 312 | 787 | -- | -- | 204 | 633 | 1,305 | 3,208 | 554 | 1,530 | -- |
| Soft maple | 2,360 | 398 | 333 | 437 | 93 | -- | -- | -- | 242 | -- | 164 | 693 | -- |
| Elm | 14,432 | 3,570 | -- | -- | 298 | 251 | 336 | 809 | 3,584 | 3,008 | -- | 2,576 | -- |
| Black ash | 2,132 | 296 | -- | -- | 585 | 510 | -- | -- | -- | 741 | -- | -- | -- |
| White & green ash | 3,305 | 992 | -- | 334 | 180 | -- | -- | -- | 449 | 781 | -- | 569 | -- |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | 17,195 | -- | 452 | 7,302 | 2,544 | -- | 1,488 | 1,624 | 248 | -- | 2,717 | 272 | 548 |
| Quaking aspen | 35,129 | 6,224 | 1,683 | 6,954 | 893 | 2,065 | 2,667 | -- | 1,911 | 235 | 3,958 | 3,630 | 4,909 |
| Paper birch | 10,668 | 2,498 | -- | 4,971 | 187 | 620 | 539 | -- | -- | 775 | 230 | 497 | 351 |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 326 | -- | -- | -- | -- | -- | -- | -- | 326 | -- | -- | -- | -- |
| Black walnut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 123,824 | 18,299 | 6,987 | 24,237 | 5,583 | 3,446 | 7,275 | 9,218 | 11,293 | 11,694 | 8,326 | 11,445 | 6,021 |
| All species | 167,673 | 25,057 | 7,644 | 28,745 | 8,820 | 7,878 | 12,830 | 12,109 | 13,378 | 11,694 | 19,272 | 12,813 | 7,433 |

(Table 56 continued on next page)

(Table 56 continued)

| Species group | Total Central Unit | Central Unit<br>Adams | Chippewa | Clark | Eau Claire | Jackson | Juneau | Marathon | Marquette | Monroe | Portage | Waupaca | Waushara | Wood |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | | | | | | | |
| Jack pine | 10,120 | 4,295 | -- | 1,217 | 578 | 680 | 1,235 | -- | -- | 1,911 | -- | -- | -- | 204 |
| Red pine | 1,243 | -- | 389 | -- | -- | -- | -- | 315 | -- | -- | 352 | -- | -- | 187 |
| White pine | 7,535 | -- | -- | -- | -- | -- | -- | 471 | 2,566 | -- | 1,965 | 1,462 | 511 | 560 |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hemlock | 1,032 | -- | -- | -- | -- | -- | -- | 1,032 | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 19,930 | 4,295 | 389 | 1,217 | 578 | 680 | 1,235 | 1,818 | 2,566 | 1,911 | 2,317 | 1,462 | 511 | 951 |
| Hardwoods | | | | | | | | | | | | | | |
| White oak | 4,309 | 379 | -- | 2,112 | -- | -- | -- | -- | -- | 155 | 299 | 994 | -- | 370 |
| Select red oak | 11,153 | -- | 1,431 | 1,883 | 983 | 460 | -- | 555 | -- | 1,938 | 566 | 2,701 | -- | 636 |
| Other red oak | 5,042 | 1,085 | -- | -- | 449 | 190 | 1,651 | -- | -- | 153 | 897 | -- | 150 | 467 |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | 259 | -- | -- | -- | -- | -- | -- | 259 | -- | -- | -- | -- | -- | -- |
| Basswood | 5,269 | -- | 2,195 | 583 | -- | -- | -- | 1,427 | -- | -- | -- | -- | -- | 1,064 |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | 3,398 | -- | -- | -- | -- | -- | -- | 2,650 | -- | -- | -- | 248 | -- | 500 |
| Hard maple | 6,404 | -- | 261 | 702 | -- | -- | -- | 3,682 | -- | -- | -- | 1,485 | -- | 274 |
| Soft maple | 3,974 | -- | 744 | -- | -- | -- | -- | 945 | -- | 168 | 443 | 1,242 | -- | 432 |
| Elm | 17,444 | -- | 503 | 3,651 | -- | -- | -- | 9,971 | -- | -- | -- | 2,138 | -- | 1,181 |
| Black ash | 721 | -- | 271 | 236 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 214 |
| White & green ash | 2,759 | -- | -- | -- | -- | -- | -- | 2,030 | -- | -- | 164 | -- | -- | 565 |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | 3,807 | 251 | 704 | 315 | 374 | -- | -- | 639 | -- | 591 | -- | 331 | -- | 602 |
| Quaking aspen | 14,349 | 495 | 4,453 | 2,698 | 404 | -- | -- | 4,699 | -- | -- | 680 | -- | -- | 920 |
| Paper birch | 748 | -- | -- | 467 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 281 |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black walnut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 79,636 | 2,210 | 10,562 | 12,647 | 2,210 | 650 | 1,651 | 26,857 | -- | 3,005 | 3,049 | 9,139 | 150 | 7,506 |
| All species | 99,566 | 6,505 | 10,951 | 13,864 | 2,788 | 1,330 | 2,886 | 28,675 | 2,566 | 4,916 | 5,366 | 10,601 | 661 | 8,457 |

(Table 56 continued on next page)

96

(Table 56 continued)

| Species group | Total Southwest Unit | Buffalo | Crawford | Dunn | Grant | Iowa | La Crosse | Lafayette | Pepin | Pierce | Richland | St.Croix | Sauk | Trempealeau | Vernon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Southwest Unit | | | | | | | | | | | | | |
| **Softwoods** | | | | | | | | | | | | | | | |
| Jack pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Red pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hemlock | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **Hardwoods** | | | | | | | | | | | | | | | |
| White oak | 11,594 | 169 | -- | 371 | 1,758 | 749 | 279 | -- | 221 | 300 | 237 | -- | 3,971 | 2,334 | 1,205 |
| Select red oak | 49,893 | 7,411 | 1,504 | 2,888 | 2,189 | 424 | 5,458 | -- | 1,694 | 1,701 | -- | 522 | 22,307 | 1,291 | 2,504 |
| Other red oak | 11,804 | 2,500 | 1,267 | 2,825 | -- | -- | 835 | -- | -- | -- | -- | 592 | 1,549 | 1,553 | 683 |
| Select hickory | 440 | 204 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 236 | -- | -- |
| Other hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | 6,179 | -- | -- | 1,139 | -- | -- | -- | -- | -- | 1,228 | 494 | 157 | 2,807 | -- | 354 |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | 175 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 175 | -- | -- |
| Hard maple | 6,558 | -- | -- | -- | 1,136 | -- | -- | -- | -- | 305 | -- | 4,608 | 509 | -- | -- |
| Soft maple | 5,039 | 1,994 | -- | 628 | -- | -- | -- | -- | -- | -- | -- | -- | 1,516 | 901 | -- |
| Elm | 7,024 | 139 | -- | 474 | 1,249 | 997 | 508 | -- | -- | 591 | 1,234 | 1,114 | 234 | 484 | -- |
| Black ash | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White & green ash | 1,719 | 144 | -- | -- | -- | 216 | -- | -- | -- | 270 | 324 | -- | -- | 485 | 280 |
| Cottonwood | 310 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 310 | -- | -- | -- | -- |
| Willow | 442 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 442 | -- |
| Hackberry | 233 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 233 | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | 6,235 | -- | -- | 453 | -- | -- | -- | -- | -- | -- | 1,027 | -- | 4,468 | -- | 287 |
| Quaking aspen | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Paper birch | 701 | 701 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| River birch | 307 | 307 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black walnut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | 457 | 457 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 109,110 | 14,026 | 2,771 | 8,778 | 6,332 | 2,386 | 7,080 | -- | 1,915 | 4,395 | 3,859 | 6,993 | 37,772 | 7,490 | 5,313 |
| All species | 109,110 | 14,026 | 2,771 | 8,778 | 6,332 | 2,386 | 7,080 | -- | 1,915 | 4,395 | 3,859 | 6,993 | 37,772 | 7,490 | 5,313 |

(Table 56 continued on next page)

(Table 56 continued)

| Species group | Total Southeast Unit | Southeast Unit Brown | Calumet | Columbia | Dane | Dodge | Door | Fond du Lac | Green | Green Lake | Jefferson | Kenosha | Kewaunee | Manitowoc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | | | | | | | |
| Jack pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Red pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White pine | 36 | -- | -- | -- | -- | -- | 36 | -- | -- | -- | -- | -- | -- | -- |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hemlock | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 305 | -- | -- | -- | -- | -- | 145 | -- | -- | -- | -- | -- | 160 | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 341 | -- | -- | -- | -- | -- | 181 | -- | -- | -- | -- | -- | 160 | -- |
| Hardwoods | | | | | | | | | | | | | | |
| White oak | 4,700 | -- | -- | 1,425 | 2,224 | -- | -- | -- | 159 | -- | 191 | -- | -- | -- |
| Select red oak | 9,305 | -- | -- | 3,152 | 2,051 | -- | -- | -- | 1,104 | 619 | -- | 188 | -- | -- |
| Other red oak | 3,018 | -- | -- | 2,058 | 756 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | 241 | -- | -- | -- | -- | 241 | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hard maple | 3,086 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Soft maple | 9,104 | 4,294 | -- | -- | -- | -- | -- | 209 | -- | -- | -- | -- | -- | 514 |
| Elm | 7,163 | 2,329 | -- | -- | -- | -- | 371 | -- | 1,953 | -- | -- | -- | 1,133 | -- |
| Black ash | 297 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 297 | -- | -- | -- |
| White & green ash | 2,475 | -- | -- | -- | -- | -- | 922 | -- | -- | -- | -- | -- | -- | -- |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Quaking aspen | 128 | -- | -- | 128 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Paper birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 639 | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black walnut | 185 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 40,341 | 6,623 | -- | 6,763 | 5,670 | 241 | 1,293 | 209 | 3,216 | 619 | 488 | 188 | 1,133 | 514 |
| All species | 40,682 | 6,623 | -- | 6,763 | 5,670 | 241 | 1,474 | 209 | 3,216 | 619 | 488 | 188 | 1,293 | 514 |

(Table 56 continued on next page)

(Table 56 continued)

| | Southeast Unit | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Species group | Milwaukee | Outagamie | Ozaukee | Racine | Rock | Sheboygen | Walworth | Washington | Waukesha | Winnebago |
| Softwoods | | | | | | | | | | |
| Jack pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Red pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White pine | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black spruce | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam fir | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hemlock | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Tamarack | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hardwoods | | | | | | | | | | |
| White oak | -- | 181 | -- | -- | -- | 195 | 325 | -- | -- | -- |
| Select red oak | -- | 796 | -- | -- | -- | 738 | -- | -- | 203 | 454 |
| Other red oak | -- | -- | -- | -- | -- | -- | -- | -- | 204 | -- |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hickory | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Basswood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Beech | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yellow birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hard maple | -- | -- | -- | -- | -- | 1,020 | -- | 2,066 | -- | -- |
| Soft maple | -- | 3,913 | -- | -- | -- | 174 | -- | -- | -- | -- |
| Elm | -- | 748 | -- | -- | -- | -- | -- | 155 | -- | 474 |
| Black ash | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| White & green ash | -- | 445 | -- | -- | -- | 1,108 | -- | -- | -- | -- |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bigtooth aspen | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Quaking aspen | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Paper birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Black walnut | -- | 185 | -- | -- | -- | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | -- | 6,268 | -- | -- | -- | 3,235 | 325 | 2,221 | 407 | 928 |
| All species | -- | 6,268 | -- | -- | -- | 3,235 | 325 | 2,221 | 407 | 928 |

Table 57.--Timber removals from growing stock and sawtimber on commercial forest land by species group, Wisconsin, 1967 and 1982

| Species group | Growing stock | | Sawtimber | |
|---|---|---|---|---|
| | 1967 | 1982 | 1967 | 1982 |
| | Thousand cubic feet | | Thousand board feet[1] | |
| Softwoods | | | | |
| Jack pine | 13,295 | 14,552 | 28,247 | 20,320 |
| Red pine | 1,770 | 16,502 | 6,196 | 35,981 |
| White pine | 4,162 | 7,967 | 22,414 | 36,240 |
| White spruce | 543 | 1,976 | 3,386 | 5,155 |
| Black spruce | 612 | 1,235 | 838 | 884 |
| Balsam fir | 3,963 | 9,351 | 14,227 | 17,602 |
| Hemlock | 4,237 | 4,839 | 21,414 | 12,433 |
| Tamarack | 329 | 545 | 985 | 654 |
| Northern white-cedar | 1,043 | 2,421 | 2,331 | 4,383 |
| Other softwoods | 2 | -- | 1 | -- |
| Total | 29,956 | 59,388 | 100,039 | 133,652 |
| Hardwoods | | | | |
| White oak | 8,142 | 10,025 | 23,911 | 41,499 |
| Select red oak | 24,558 | 28,156 | 91,847 | 120,169 |
| Other red oak | 9,083 | 11,211 | 26,226 | 43,856 |
| Hickory | 2,013 | 644 | 3,188 | 2,294 |
| Basswood | 8,198 | 7,199 | 28,330 | 25,798 |
| Beech | 334 | 321 | 1,560 | 1,312 |
| Yellow birch | 3,037 | 3,027 | 11,962 | 8,206 |
| Hard maple | 17,551 | 21,064 | 63,978 | 75,889 |
| Soft maple | 9,732 | 10,322 | 24,623 | 28,684 |
| Elm | 13,300 | 15,600 | 46,906 | 52,498 |
| Ash | 7,116 | 6,675 | 17,038 | 16,991 |
| Cottonwood | 449 | 120 | 1,853 | 568 |
| Balsam poplar | 85 | 148 | 179 | 306 |
| Bigtooth aspen | 21,059 | 22,002 | 64,025 | 70,020 |
| Quaking aspen | 66,532 | 74,114 | 118,278 | 183,661 |
| Paper birch | 10,497 | 13,333 | 19,622 | 16,907 |
| Black walnut | 292 | 134 | 1,677 | 519 |
| Other hardwoods[2] | 1,216 | 1,475 | 4,926 | 3,498 |
| Total | 203,194 | 225,570 | 550,129 | 692,675 |
| All species | 233,150 | 284,958 | 650,168 | 826,327 |

[1] International ¼-inch rule.

[2] Includes willow, hackberry, river birch, black cherry and butternut.

Table 58.--Timber removals from growing stock and sawtimber on commercial forest land by item and species category, Wisconsin, 1982

| Item | Growing stock | | | | | | Sawtimber | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All species | Pine | Other softwoods | Aspen | Oak | Other hardwoods | All species | Pine | Other softwoods | Aspen | Oak | Other hardwoods |
| | Thousand cubic feet | | | | | | Thousand board feet[1] | | | | | |
| Roundwood products | | | | | | | | | | | | |
| Pulpwood[2] | 138,978 | 26,326 | 11,711 | 68,867 | 4,754 | 27,320 | 274,919 | 39,422 | 19,271 | 159,938 | 10,984 | 45,304 |
| Saw logs | 79,456 | 9,017 | 3,609 | 13,175 | 27,791 | 25,864 | 413,368 | 48,309 | 17,265 | 66,198 | 148,085 | 133,511 |
| Fuelwood | 20,387 | 128 | 43 | 1,569 | 8,278 | 10,369 | 58,801 | 369 | 99 | 4,892 | 23,777 | 29,664 |
| Posts | 3,412 | 1,471 | 1,373 | 94 | 229 | 245 | 3,714 | 1,105 | 1,408 | 185 | 494 | 522 |
| Veneer logs | 3,961 | 5 | -- | 1,899 | 902 | 1,155 | 25,610 | 41 | -- | 12,282 | 5,820 | 7,467 |
| Poles | 142 | 126 | 14 | -- | 2 | -- | 571 | 503 | 54 | -- | 14 | -- |
| Other | 811 | 1 | -- | 483 | 107 | 220 | 4,264 | 4 | -- | 2,323 | 803 | 1,134 |
| Total | 247,147 | 37,074 | 16,750 | 86,087 | 42,063 | 65,173 | 781,247 | 89,753 | 38,097 | 245,818 | 189,977 | 217,602 |
| Logging residue | 16,375 | 1,116 | 653 | 5,297 | 4,134 | 5,175 | 30,610 | 2,038 | 1,333 | 4,661 | 10,991 | 11,587 |
| Other removals | 21,436 | 831 | 2,964 | 4,732 | 3,195 | 9,714 | 14,470 | 750 | 1,681 | 3,202 | 4,556 | 4,281 |
| All removals | 284,958 | 39,021 | 20,367 | 96,116 | 49,392 | 80,062 | 826,327 | 92,541 | 41,111 | 253,681 | 205,524 | 233,470 |

[1] International 1/4-inch rule.

[2] Includes particleboard and waferboard bolts.

[3] Less than 500 cubic feet.

Table 59.--Net annual growth and removals of growing stock and sawtimber on commercial forest land by species group, Wisconsin, 1982

| Species group | Growing stock | | Sawtimber | |
|---|---|---|---|---|
| | Growth | Removals | Growth | Removals |
| | Thousand cubic feet | | Thousand board feet[1] | |
| Softwoods | | | | |
| Jack pine | 23,092 | 14,552 | 71,795 | 20,320 |
| Red pine | 43,977 | 16,502 | 122,739 | 35,981 |
| White pine | 16,876 | 7,967 | 83,335 | 36,240 |
| White spruce | 10,934 | 1,976 | 39,075 | 5,155 |
| Black spruce | 5,491 | 1,235 | 4,577 | 884 |
| Balsam fir | 22,338 | 9,351 | 69,757 | 17,602 |
| Hemlock | 2,840 | 4,839 | 12,886 | 12,433 |
| Tamarack | 2,041 | 545 | 7,231 | 654 |
| Eastern redcedar | 244 | -- | 251 | -- |
| Northern white-cedar | 14,647 | 2,421 | 46,882 | 4,383 |
| Other softwoods | 183 | -- | 413 | -- |
| Total | 142,663 | 59,388 | 458,941 | 133,652 |
| Hardwoods | | | | |
| White oak | 11,453 | 10,025 | 57,123 | 41,499 |
| Select red oak | 34,507 | 28,156 | 153,714 | 120,169 |
| Other red oak | 15,934 | 11,211 | 71,490 | 43,856 |
| Hickory | 6,109 | 644 | 14,347 | 2,294 |
| Basswood | 25,979 | 7,199 | 88,496 | 25,798 |
| Beech | 653 | 321 | 1,679 | 1,312 |
| Yellow birch | 2,673 | 3,027 | 7,464 | 8,206 |
| Hard maple | 46,806 | 21,064 | 109,715 | 75,889 |
| Soft maple | 51,605 | 10,322 | 77,489 | 28,684 |
| Elm | -359 | 15,600 | 4,764 | 52,498 |
| Ash | 26,214 | 6,675 | 72,103 | 16,991 |
| Cottonwood | 1,008 | 120 | 4,266 | 568 |
| Balsam poplar | 733 | 148 | 2,032 | 306 |
| Bigtooth aspen | 19,240 | 22,002 | 66,267 | 70,020 |
| Quaking aspen | 60,648 | 74,114 | 168,395 | 183,661 |
| Paper birch | 34,906 | 13,333 | 57,418 | 16,907 |
| Black walnut | 611 | 134 | 3,762 | 519 |
| Other hardwoods[2] | 9,853 | 1,475 | 23,554 | 3,498 |
| Total | 348,573 | 225,570 | 984,078 | 692,675 |
| All species | 491,236 | 284,958 | 1,443,019 | 826,327 |

[1] International ¼-inch rule.

[2] Includes willow, hackberry, river birch, black cherry and butternut.

Table 60.--Net annual growth and removals of growing stock on commercial forest land by ownership class and softwoods and hardwoods, Wisconsin, 1982

(In thousand cubic feet)

| Ownership class | Net annual growth: All species | Net annual growth: Softwoods | Net annual growth: Hardwoods | Annual timber removals: All species | Annual timber removals: Softwoods | Annual timber removals: Hardwoods |
|---|---|---|---|---|---|---|
| National Forest | 47,866 | 14,384 | 33,482 | 17,291 | 5,991 | 11,300 |
| Miscellaneous federal | 4,127 | 1,543 | 2,584 | 170 | 124 | 46 |
| State | 18,037 | 7,236 | 10,801 | 5,372 | 1,804 | 3,568 |
| County and municipal | 74,770 | 25,061 | 49,709 | 41,396 | 7,170 | 34,226 |
| Indian | 12,021 | 4,484 | 7,537 | 9,013 | 3,047 | 5,966 |
| Forest industry | 42,140 | 13,788 | 28,352 | 29,012 | 9,001 | 20,011 |
| Farmer and other[1/] | 292,275 | 76,167 | 216,108 | 182,704 | 32,251 | 150,453 |
| All owners | 491,236 | 142,663 | 348,573 | 284,958 | 59,388 | 225,570 |

[1/] Includes miscellaneous private-corporation and miscellaneous private-indivdual.

Table 61.--Net annual growth and removals of sawtimber on commercial forest land by ownership class and softwoods and hardwoods, Wisconsin, 1982

(In thousand board feet)[1]

| Ownership class | Net annual growth |  |  | Annual timber removals |  |  |
|---|---|---|---|---|---|---|
|  | All species | Softwoods | Hardwoods | All species | Softwoods | Hardwoods |
| National Forest | 171,142 | 81,079 | 90,063 | 44,267 | 13,093 | 31,174 |
| Miscellaneous federal | 10,698 | 5,442 | 5,256 | 400 | 202 | 198 |
| State | 49,558 | 24,531 | 25,027 | 13,083 | 4,245 | 8,838 |
| County and municipal | 181,415 | 73,249 | 108,166 | 97,558 | 13,321 | 84,237 |
| Indian | 39,787 | 18,355 | 21,432 | 28,932 | 10,050 | 18,882 |
| Forest industry | 118,039 | 49,693 | 68,346 | 75,439 | 19,820 | 55,619 |
| Farmer and other[2] | 872,380 | 206,592 | 665,788 | 566,648 | 72,921 | 493,727 |
| All owners | 1,443,019 | 458,941 | 984,078 | 826,327 | 133,652 | 692,675 |

[1] International 1/4-inch rule.

[2] Includes miscellaneous private-corporation and miscellaneous private-indivdual.

Table 62.--Annual mortality of growing stock on commercial forest land by softwoods and hardwoods, Wisconsin, 1967 and 1982

(In thousand cubic feet)

| Species | 1967[1] | 1982 |
|---|---|---|
| Softwoods | 15,688 | 22,051 |
| Hardwoods | 80,519 | 114,717 |
| Total | 96,207 | 136,768 |

[1] Figures have been adjusted from those published after the 1968 survey to conform to 1982 volumes because of changes in survey procedures and volume equations.

Table 63.--Annual mortality of growing stock on commercial forest land by species group and cause, Wisconsin, 1982

(In thousand cubic feet)

| Species group | All causes | Cause | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Insects | Disease | Fire | Animals | Weather | Suppression | Unknown and other |
| Softwoods | | | | | | | | |
| Jack pine | 4,206 | 54 | 537 | 265 | 10 | 319 | 61 | 2,960 |
| Red pine | 170 | -- | 0 | 10 | 13 | 15 | -- | 132 |
| White pine | 1,421 | 28 | 129 | -- | 31 | 67 | 7 | 1,159 |
| White spruce | 719 | 20 | 18 | -- | 2 | 101 | 131 | 447 |
| Black spruce | 862 | 10 | 100 | -- | 12 | 248 | 2 | 490 |
| Balsam fir | 9,855 | 1,101 | 545 | -- | 26 | 2,307 | 42 | 5,834 |
| Hemlock | 1,474 | 1 | 62 | -- | 56 | 207 | 4 | 1,144 |
| Tamarack | 2,294 | 22 | 251 | -- | 114 | 263 | -- | 1,644 |
| Eastern redcedar | -- | -- | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | 1,041 | -- | 26 | -- | 5 | 338 | 1 | 671 |
| Other softwoods | 9 | -- | -- | -- | 1 | -- | -- | 8 |
| Total | 22,051 | 1,236 | 1,668 | 275 | 270 | 3,865 | 248 | 14,489 |
| Hardwoods | | | | | | | | |
| White oak | 1,802 | -- | 88 | 2 | 4 | 111 | 36 | 1,561 |
| Select red oak | 6,443 | 1 | 520 | 14 | 50 | 1,019 | 21 | 4,818 |
| Other red oak | 7,227 | 1 | 604 | 15 | 1 | 477 | 10 | 6,119 |
| Select hickory | 161 | -- | 1 | -- | -- | 39 | -- | 121 |
| Other hickory | 263 | -- | -- | -- | -- | 15 | -- | 248 |
| Basswood | 3,248 | 20 | 195 | -- | 16 | 182 | 88 | 2,747 |
| Beech | 548 | -- | 21 | -- | -- | -- | -- | 527 |
| Yellow birch | 2,517 | -- | 376 | -- | -- | 165 | 1 | 1,975 |
| Hard maple | 4,374 | 3 | 619 | -- | 64 | 417 | 25 | 3,246 |
| Soft maple | 5,603 | 1 | 694 | 45 | 6 | 519 | 16 | 4,322 |
| Elm | 22,556 | 531 | 16,561 | -- | 14 | 157 | 33 | 5,260 |
| Black ash | 2,185 | -- | 57 | -- | 2 | 163 | 1 | 1,962 |
| White & green ash | 640 | -- | 40 | 2 | -- | 45 | 25 | 528 |
| Cottonwood | 93 | -- | 3 | -- | 3 | 2 | -- | 85 |
| Willow | 284 | -- | 12 | -- | -- | 33 | -- | 239 |
| Hackberry | 28 | -- | -- | -- | -- | -- | -- | 28 |
| Balsam poplar | 106 | -- | 4 | -- | -- | -- | -- | 102 |
| Bigtooth aspen | 4,854 | 7 | 428 | 27 | -- | 134 | -- | 4,258 |
| Quaking aspen | 16,106 | 34 | 2,928 | 114 | 60 | 1,128 | 67 | 11,775 |
| Paper birch | 31,246 | 19 | 6,409 | 11 | 221 | 3,630 | 159 | 20,797 |
| River birch | 2,684 | -- | 541 | 2 | 41 | 124 | 25 | 1,951 |
| Black cherry | 1,092 | -- | 209 | -- | 15 | 29 | 54 | 785 |
| Black walnut | 96 | -- | 4 | -- | 1 | -- | -- | 91 |
| Butternut | 471 | -- | 99 | -- | -- | 14 | -- | 358 |
| Other hardwoods | 90 | -- | 10 | -- | -- | 1 | 2 | 77 |
| Total | 114,717 | 617 | 30,423 | 232 | 498 | 8,404 | 563 | 73,980 |
| All species | 136,768 | 1,853 | 32,091 | 507 | 768 | 12,269 | 811 | 88,469 |

Table 64.--Annual mortality of sawtimber on commercial forest land by species group and cause, Wisconsin, 1982

(In thousand board feet)[1/]

| Species group | All causes | Cause: Insects | Disease | Fire | Animals | Weather | Suppression | Unknown and other |
|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | |
| Jack pine | 6,535 | 128 | 368 | 254 | 30 | 1,196 | 6 | 4,553 |
| Red pine | 648 | -- | -- | -- | -- | 86 | -- | 562 |
| White pine | 6,434 | 75 | 702 | -- | 176 | 415 | 2 | 5,064 |
| White spruce | 1,708 | 9 | 62 | -- | 4 | 313 | -- | 1,320 |
| Black spruce | 590 | 55 | 18 | -- | -- | 355 | -- | 162 |
| Balsam fir | 15,511 | 622 | 1,751 | -- | 17 | 4,065 | 3 | 9,053 |
| Hemlock | 5,752 | 8 | 249 | -- | 197 | 878 | 14 | 4,406 |
| Tamarack | 1,589 | -- | 97 | -- | -- | 346 | -- | 1,146 |
| Eastern redcedar | 1 | -- | -- | -- | -- | -- | -- | 1 |
| Northern white-cedar | 3,023 | 5 | 204 | -- | 67 | 1,185 | -- | 1,562 |
| Other softwoods | 4 | -- | -- | -- | -- | -- | -- | 4 |
| Total | 41,795 | 902 | 3,451 | 254 | 491 | 8,839 | 25 | 27,833 |
| Hardwoods | | | | | | | | |
| White oak | 4,188 | -- | 298 | -- | 18 | 353 | 8 | 3,511 |
| Select red oak | 18,574 | -- | 1,586 | -- | 247 | 2,610 | 4 | 14,127 |
| Other red oak | 10,656 | -- | 707 | 65 | -- | 1,421 | -- | 8,463 |
| Select hickory | 454 | -- | 11 | -- | -- | 5 | -- | 438 |
| Other hickory | 27 | 6 | 7 | -- | -- | -- | -- | 14 |
| Basswood | 6,208 | 24 | 648 | -- | 51 | 521 | -- | 4,964 |
| Beech | 2,083 | -- | 47 | -- | -- | -- | -- | 2,036 |
| Yellow birch | 7,752 | -- | 1,137 | -- | -- | 701 | -- | 5,914 |
| Hard maple | 8,624 | -- | 1,290 | -- | 36 | 1,258 | 76 | 5,964 |
| Soft maple | 7,156 | -- | 1,086 | -- | 10 | 516 | -- | 5,544 |
| Elm | 70,205 | 1,221 | 51,608 | -- | 53 | 571 | -- | 16,752 |
| Black ash | 2,207 | -- | 26 | -- | -- | 188 | -- | 1,993 |
| White & green ash | 1,456 | -- | 153 | -- | -- | 136 | -- | 1,167 |
| Cottonwood | 229 | -- | 11 | -- | 15 | 6 | -- | 197 |
| Willow | 838 | -- | 14 | -- | -- | 135 | -- | 689 |
| Hackberry | 121 | -- | -- | -- | -- | -- | -- | 121 |
| Balsam poplar | 383 | -- | -- | -- | -- | -- | -- | 383 |
| Bigtooth aspen | 9,573 | 30 | 685 | -- | -- | 615 | -- | 8,243 |
| Quaking aspen | 18,122 | 172 | 3,963 | -- | 78 | 2,477 | -- | 11,432 |
| Paper birch | 37,320 | -- | 8,750 | -- | 240 | 5,921 | -- | 22,409 |
| River birch | 1,667 | -- | 244 | 3 | 3 | 125 | -- | 1,292 |
| Black cherry | 873 | -- | 153 | -- | -- | 61 | -- | 659 |
| Black walnut | 317 | -- | 20 | -- | 8 | -- | -- | 289 |
| Butternut | 814 | -- | 127 | -- | -- | -- | -- | 687 |
| Other hardwoods | 141 | -- | 17 | -- | -- | -- | -- | 124 |
| Total | 209,988 | 1,453 | 72,588 | 68 | 759 | 17,620 | 88 | 117,412 |
| All species | 251,783 | 2,355 | 76,039 | 322 | 1,250 | 26,459 | 113 | 145,245 |

[1/] International 1/4-inch rule.

Table 65.--Annual mortality of growing stock and sawtimber on commercial forest land by ownership class and softwoods and hardwoods, Wisconsin, 1982

| Ownership class | Growing stock: All species | Growing stock: Softwoods | Growing stock: Hardwoods | Sawtimber: All species | Sawtimber: Softwoods | Sawtimber: Hardwoods |
|---|---|---|---|---|---|---|
| | Thousand cubic feet | | | Thousand board feet[1/] | | |
| National Forest | 14,286 | 6,850 | 7,436 | 23,492 | 9,819 | 13,673 |
| Miscellaneous federal | 1,533 | 169 | 1,364 | 3,313 | 476 | 2,837 |
| State | 4,959 | 817 | 4,142 | 9,195 | 1,623 | 7,572 |
| County and municipal | 20,452 | 3,086 | 17,366 | 24,975 | 6,077 | 18,898 |
| Indian | 4,742 | 764 | 3,978 | 12,147 | 3,134 | 9,013 |
| Forest industry | 9,761 | 2,229 | 7,532 | 16,715 | 4,602 | 12,113 |
| Farmer | 32,840 | 2,186 | 30,654 | 80,885 | 3,878 | 77,007 |
| Misc. private-corp. | 5,912 | 495 | 5,417 | 10,078 | 906 | 9,172 |
| Misc. private-indiv. | 42,283 | 5,455 | 36,828 | 70,983 | 11,280 | 59,703 |
| All owners | 136,768 | 22,051 | 114,717 | 251,783 | 41,795 | 209,988 |

[1/] International 1/4-inch rule.

Table 66.--Output of timber products by product, softwoods and hardwoods, and source of material, Wisconsin, 1981

| Product | Standard units | Total | | Roundwood products | | | | Plant byproducts | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Growing stock | | Non-growing stock | | | |
| | | No. of units | Thousand cubic feet | No. of units | Thousand cubic feet | No. of units | Thousand cubic feet | No. of units | Thousand cubic feet |
| Pulpwood[1] | | | | | | | | | |
| Softwoods | Standard[2] cords | 632,007 | 49,845 | 482,292 | 38,037 | 103,076 | 8,124 | 46,639 | 3,684 |
| Hardwoods | | 1,756,746 | 138,761 | 1,277,953 | 100,941 | 234,817 | 18,546 | 243,976 | 19,274 |
| Total | | 2,388,753 | 188,606 | 1,760,245 | 138,978 | 337,893 | 26,670 | 290,615 | 22,958 |
| Saw logs | | | | | | | | | |
| Softwoods | Thousand[3] board feet | 75,683 | 13,450 | 70,952 | 12,626 | 4,731 | 824 | -- | -- |
| Hardwoods | | 415,092 | 72,544 | 382,381 | 66,830 | 32,711 | 5,714 | -- | -- |
| Total | | 490,775 | 85,994 | 453,333 | 79,456 | 37,442 | 6,538 | -- | -- |
| Veneer logs | | | | | | | | | |
| Softwoods | Thousand[3] board feet | 44 | 5 | 44 | 5 | -- | -- | -- | -- |
| Hardwoods | | 27,206 | 4,384 | 24,548 | 3,956 | 2,658 | 428 | -- | -- |
| Total | | 27,250 | 4,389 | 24,592 | 3,961 | 2,658 | 428 | -- | -- |
| Fuelwood | | | | | | | | | |
| Softwoods | Standard[2] cords | 87,988 | 6,141 | 2,460 | 171 | 46,970 | 3,272 | 38,558 | 2,698 |
| Hardwoods | | 2,077,523 | 145,282 | 289,137 | 20,216 | 1,577,412 | 110,298 | 210,974 | 14,768 |
| Total | | 2,165,511 | 151,423 | 291,597 | 20,387 | 1,624,382 | 113,570 | 249,532 | 17,466 |
| Posts | | | | | | | | | |
| Softwoods | Thousand pieces | 3,350 | 3,441 | 2,769 | 2,844 | 581 | 597 | -- | -- |
| Hardwoods | | 921 | 920 | 569 | 568 | 352 | 352 | -- | -- |
| Total | | 4,271 | 4,361 | 3,338 | 3,412 | 933 | 949 | -- | -- |
| Poles | | | | | | | | | |
| Softwoods | Pieces | 16,417 | 140 | 16,417 | 140 | -- | -- | -- | -- |
| Hardwoods | | 375 | 2 | 375 | 2 | -- | -- | -- | -- |
| Total | | 16,792 | 142 | 16,792 | 142 | -- | -- | -- | -- |
| Other[4] | | | | | | | | | |
| Softwoods | Thousand cubic feet | 1,499 | 1,499 | 1 | 1 | -- | -- | 1,498 | 1,498 |
| Hardwoods | | 8,167 | 8,167 | 810 | 810 | 34 | 34 | 7,323 | 7,323 |
| Total | | 9,666 | 9,666 | 811 | 811 | 34 | 34 | 8,821 | 8,821 |
| All products | | | | | | | | | |
| Softwoods | Thousand cubic feet | -- | 74,521 | -- | 53,824 | -- | 12,817 | -- | 7,880 |
| Hardwoods | | -- | 370,060 | -- | 193,323 | -- | 135,372 | -- | 41,365 |
| Total | | -- | 444,581 | -- | 247,147 | -- | 148,189 | -- | 49,245 |

[1] Includes roundwood and plant byproducts used for particleboard and waferboard.

[2] 128 cubic feet; includes wood, bark, and air space.

[3] International 1/4-inch rule.

[4] Other (industrial production) includes cabin logs, charcoal wood, shingle bolts, pilings, etc.

Table 67.--Output of roundwood products by product, softwoods and hardwoods, and source of material, Wisconsin, 1981

(In thousand cubic feet)

| Product and species group | All sources | Growing-stock trees |  |  | Rough and rotten trees | Salvable dead trees | Other sources |
|---|---|---|---|---|---|---|---|
|  |  | Total | Sawtimber | Poletimber |  |  |  |
| Industrial products |  |  |  |  |  |  |  |
| Saw logs |  |  |  |  |  |  |  |
| Softwoods | 13,450 | 12,626 | 11,812 | 814 | 37 | 173 | 614 |
| Hardwoods | 72,544 | 66,830 | 60,561 | 6,269 | 1,194 | 3,362 | 1,158 |
| Subtotal | 85,994 | 79,456 | 72,373 | 7,083 | 1,231 | 3,535 | 1,772 |
| Veneer logs and bolts |  |  |  |  |  |  |  |
| Softwoods | 5 | 5 | 5 | -- | -- | -- | -- |
| Hardwoods | 4,384 | 3,956 | 3,956 | -- | 424 | -- | 4 |
| Subtotal | 4,389 | 3,961 | 3,961 | -- | 424 | -- | 4 |
| Pulpwood[1] |  |  |  |  |  |  |  |
| Softwoods | 46,161 | 38,037 | 17,170 | 20,867 | 825 | 2,867 | 4,432 |
| Hardwoods | 119,487 | 100,941 | 57,299 | 43,642 | 7,925 | 4,557 | 6,064 |
| Subtotal | 165,648 | 138,978 | 74,469 | 64,509 | 8,750 | 7,424 | 10,496 |
| Cooperage |  |  |  |  |  |  |  |
| Softwoods | -- | -- | -- | -- | -- | -- | -- |
| Hardwoods | 120 | 107 | 107 | -- | 8 | -- | 5 |
| Subtotal | 120 | 107 | 107 | -- | 8 | -- | 5 |
| Piling |  |  |  |  |  |  |  |
| Softwoods | 1 | 1 | 1 | -- | -- | -- | -- |
| Hardwoods | -- | -- | -- | -- | -- | -- | -- |
| Subtotal | 1 | 1 | 1 | -- | -- | -- | -- |
| Poles |  |  |  |  |  |  |  |
| Softwoods | 140 | 140 | 117 | 23 | -- | -- | -- |
| Hardwoods | 2 | 2 | 2 | -- | -- | -- | -- |
| Subtotal | 142 | 142 | 119 | 23 | -- | -- | -- |
| Posts (Round and split) |  |  |  |  |  |  |  |
| Softwoods | 3,441 | 2,844 | 759 | 2,085 | 73 | -- | 524 |
| Hardwoods | 920 | 568 | 238 | 330 | 176 | -- | 176 |
| Subtotal | 4,361 | 3,412 | 997 | 2,415 | 249 | -- | 700 |
| Other |  |  |  |  |  |  |  |
| Softwoods | -- | -- | -- | -- | -- | -- | -- |
| Hardwoods | 724 | 703 | 514 | 189 | 11 | 4 | 6 |
| Subtotal | 724 | 703 | 514 | 189 | 11 | 4 | 6 |
| All industrial products |  |  |  |  |  |  |  |
| Softwoods | 63,198 | 53,653 | 29,864 | 23,789 | 935 | 3,040 | 5,570 |
| Hardwoods | 198,181 | 173,107 | 122,677 | 50,430 | 9,738 | 7,923 | 7,413 |
| Total | 261,379 | 226,760 | 152,541 | 74,219 | 10,673 | 10,963 | 12,983 |
| Fuelwood |  |  |  |  |  |  |  |
| Softwoods | 3,443 | 171 | 105 | 66 | 33 | 1,614 | 1,625 |
| Hardwoods | 130,514 | 20,216 | 12,395 | 7,821 | 3,989 | 60,646 | 45,663 |
| Total | 133,957 | 20,387 | 12,500 | 7,887 | 4,022 | 62,260 | 47,288 |
| All products |  |  |  |  |  |  |  |
| Softwoods | 66,641 | 53,824 | 29,969 | 23,855 | 968 | 4,654 | 7,195 |
| Hardwoods | 328,695 | 193,323 | 135,072 | 58,251 | 13,727 | 68,569 | 53,076 |
| Total | 395,336 | 247,147 | 165,041 | 82,106 | 14,695 | 73,223 | 60,271 |

[1] Includes particleboard and waferboard bolts.

Table 68.--Timber products from roundwood by species group and product, Wisconsin, 1981

| Species group | All products | Pulpwood[1] | | Saw logs | | Veneer logs | |
|---|---|---|---|---|---|---|---|
| | Thousand cubic feet | Standard cords [2] | Thousand cubic feet | Thousand board feet[3] | Thousand cubic feet | Thousand board feet[3] | Thousand cubic feet |
| Softwoods | | | | | | | |
| Jack pine | 19,023 | 217,116 | 17,125 | 5,043 | 1,056 | -- | -- |
| Red pine | 19,493 | 180,878 | 14,287 | 14,669 | 2,482 | -- | -- |
| White pine | 8,821 | 21,346 | 1,676 | 36,628 | 6,220 | 44 | 5 |
| White spruce | 1,722 | 15,491 | 1,221 | 2,200 | 460 | -- | -- |
| Black spruce | 1,146 | 11,847 | 929 | 947 | 198 | -- | -- |
| Balsam fir | 9,613 | 104,778 | 8,249 | 5,150 | 1,079 | -- | -- |
| Hemlock | 4,249 | 28,932 | 2,285 | 8,913 | 1,514 | -- | -- |
| Tamarack | 453 | 4,980 | 389 | 88 | 17 | -- | -- |
| Northern white-cedar | 2,121 | -- | -- | 2,045 | 424 | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- |
| Total | 66,641 | 585,368 | 46,161 | 75,683 | 13,450 | 44 | 5 |
| Hardwoods | | | | | | | |
| White oak | 20,189 | 16,988 | 1,338 | 34,490 | 6,028 | 244 | 36 |
| Select red oak | 46,339 | 45,378 | 3,578 | 93,582 | 16,393 | 4,547 | 739 |
| Other red oak | 19,502 | 15,445 | 1,219 | 38,983 | 6,826 | 1,392 | 226 |
| Hickory | 1,682 | 516 | 39 | 2,105 | 362 | -- | -- |
| Basswood | 8,228 | 15,764 | 1,241 | 28,039 | 4,993 | 1,042 | 166 |
| Beech | 721 | 46 | 2 | 2,702 | 479 | 4 | [4] |
| Yellow birch | 4,847 | 28,182 | 2,221 | 4,658 | 825 | 1,291 | 205 |
| Hard maple | 30,038 | 118,509 | 9,371 | 46,753 | 7,795 | 2,321 | 375 |
| Soft maple | 14,460 | 63,461 | 5,016 | 18,607 | 3,304 | 511 | 80 |
| Elm | 47,026 | 70,738 | 5,586 | 42,840 | 7,637 | 1,988 | 313 |
| Ash | 9,938 | 37,577 | 2,969 | 11,860 | 2,108 | 290 | 42 |
| Cottonwood | 450 | 26 | 2 | 1,378 | 235 | 83 | 14 |
| Balsam poplar | 240 | 624 | 49 | 954 | 168 | -- | -- |
| Bigtooth aspen | 22,968 | 210,522 | 16,627 | 18,119 | 3,159 | 2,896 | 471 |
| Quaking aspen | 76,583 | 754,627 | 59,611 | 58,288 | 10,172 | 10,075 | 1,638 |
| Paper birch | 18,921 | 130,661 | 10,333 | 9,186 | 1,627 | 441 | 67 |
| Black walnut | 245 | -- | -- | 753 | 123 | 34 | 5 |
| Other hardwoods[5] | 6,318 | 3,706 | 285 | 1,795 | 310 | 47 | 7 |
| Total | 328,695 | 1,512,770 | 119,487 | 415,092 | 72,544 | 27,206 | 4,384 |
| All species | 395,336 | 2,098,138 | 165,648 | 490,775 | 85,994 | 27,250 | 4,389 |

(Table 68 continued on next page)

[1] Includes particleboard and waferboard bolts.

[2] 128 cubic feet; includes wood, bark, and air space.

[3] International 1/4-inch rule.

[4] Less than 500 cubic feet.

[5] Includes willow, hackberry, river birch, black cherry and butternut.

(Table 68 continued)

| Species group | Fuelwood | | Posts | | Poles | | Other products |
|---|---|---|---|---|---|---|---|
| | Standard cords [2] | Thousand cubic feet | Thousand pieces | Thousand cubic feet | Pieces | Thousand cubic feet | Thousand cubic feet |
| Softwoods | | | | | | | |
| Jack pine | 12,094 | 842 | -- | -- | -- | -- | -- |
| Red pine | 9,568 | 666 | 1,880 | 1,931 | 14,817 | 126 | 1 |
| White pine | 13,176 | 920 | -- | -- | -- | -- | -- |
| White spruce | 591 | 41 | -- | -- | -- | -- | -- |
| Black spruce | 276 | 19 | -- | -- | -- | -- | -- |
| Balsam fir | 4,111 | 285 | -- | -- | -- | -- | -- |
| Hemlock | 6,426 | 450 | -- | -- | -- | -- | -- |
| Tamarack | 687 | 47 | -- | -- | -- | -- | -- |
| Northern white-cedar | 2,501 | 173 | 1,470 | 1,510 | 1,600 | 14 | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- |
| Total | 49,430 | 3,443 | 3,350 | 3,441 | 16,417 | 140 | 1 |
| Hardwoods | | | | | | | |
| White oak | 176,193 | 12,321 | 348 | 345 | 150 | 1 | 120 |
| Select red oak | 366,052 | 25,613 | 14 | 15 | 141 | 1 | -- |
| Other red oak | 160,431 | 11,223 | 8 | 8 | 84 | [4] | -- |
| Hickory | 18,384 | 1,281 | -- | -- | -- | -- | -- |
| Basswood | 26,191 | 1,828 | -- | -- | -- | -- | -- |
| Beech | 3,423 | 240 | -- | -- | -- | -- | -- |
| Yellow birch | 22,952 | 1,596 | -- | -- | -- | -- | -- |
| Hard maple | 178,620 | 12,487 | -- | -- | -- | -- | 10 |
| Soft maple | 84,933 | 5,928 | -- | -- | -- | -- | 132 |
| Elm | 478,585 | 33,490 | -- | -- | -- | -- | -- |
| Ash | 69,031 | 4,819 | -- | -- | -- | -- | -- |
| Cottonwood | 2,901 | 199 | -- | -- | -- | -- | -- |
| Balsam poplar | 316 | 23 | -- | -- | -- | -- | -- |
| Bigtooth aspen | 33,655 | 2,354 | 88 | 89 | -- | -- | 268 |
| Quaking aspen | 69,836 | 4,884 | 63 | 63 | -- | -- | 215 |
| Paper birch | 98,095 | 6,859 | -- | -- | -- | -- | 35 |
| Black walnut | 1,680 | 117 | -- | -- | -- | -- | -- |
| Other hardwoods [5] | 75,271 | 5,252 | 400 | 400 | -- | -- | 64 |
| Total | 1,866,549 | 130,514 | 921 | 920 | 375 | 2 | 844 |
| All species | 1,915,979 | 133,957 | 4,271 | 4,361 | 16,792 | 142 | 845 |

[2] 128 cubic feet; includes wood, bark, and air space.

[4] Less than 500 cubic feet.

[5] Includes willow, hackberry, river birch, black cherry and butternut.

Table 69.--Volume of primary plant residue by use and type of residue, Wisconsin, 1981

(In thousand cubic feet)

| Use | Wood residue | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | | Coarse [1] | | Fine [2] | | Bark [3] | |
| | Softwoods | Hardwoods | Softwoods | Hardwoods | Softwoods | Hardwoods | Softwoods | Hardwoods |
| Fiber products [4] | 2,394.6 | 14,094.8 | 2,199.5 | 12,223.9 | 195.1 | 1,870.9 | 3.6 | 189.0 |
| Charcoal | 2.9 | 447.5 | 1.9 | 389.1 | 1.0 | 58.4 | 1.3 | 241.3 |
| Industrial fuel | 1,436.3 | 9,215.3 | 746.9 | 3,747.4 | 689.4 | 5,467.9 | 1,636.5 | 9,749.8 |
| Domestic fuel | 1,262.8 | 5,552.9 | 1,176.4 | 5,151.1 | 86.4 | 401.8 | 519.6 | 1,967.7 |
| Miscellaneous [5] | 1,496.0 | 6,874.7 | 88.7 | 781.5 | 1,407.3 | 6,093.2 | 249.2 | 2,567.0 |
| Not used [6] | 189.5 | 615.1 | 66.9 | 297.4 | 122.6 | 317.7 | 193.9 | 459.5 |
| Total | 6,782.1 | 36,800.3 | 4,280.3 | 22,590.4 | 2,501.8 | 14,209.9 | 2,604.1 | 15,174.3 |

[1] Suitable for chipping such as slabs, edgings, veneer cores, etc.

[2] Not suitable for chipping such as sawdust, veneer clippings, etc.

[3] Does not include bark disposal at pulpmills.

[4] For manufacture of pulp, hardboard, or roofing felt.

[5] Livestock bedding, mulch, small dimension, and specialty items.

[6] Includes residue burned as waste.

Table 70.--All live shrub[1] biomass yields on commercial forest land by shrub species group and forest type, Wisconsin, 1983

(In pounds per acre)

| Shrub species group | Forest type | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar | Tamarack | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Non-stocked |
| Tall shrubs | | | | | | | | | | | | | | | |
| Jack pine | 340 | 18 | -- | -- | -- | 1 | -- | 44 | 42 | -- | 3 | 5 | -- | -- | -- |
| Red pine | 29 | 178 | -- | -- | -- | 6 | -- | -- | 2 | -- | -- | 1 | 1 | -- | -- |
| White pine | 19 | 16 | 287 | -- | -- | 60 | -- | 1 | 10 | 3 | 20 | 22 | 9 | -- | -- |
| White spruce | -- | -- | -- | 3 | 290 | -- | 8 | -- | 1 | 9 | 6 | 8 | 27 | -- | -- |
| Black spruce | 4 | 17 | 1 | 34 | -- | 1,396 | 10 | 956 | -- | -- | 17 | 5 | 12 | -- | -- |
| Balsam fir | 25 | 94 | 151 | 959 | 26 | 251 | 644 | 425 | 6 | 119 | 134 | 116 | 213 | -- | -- |
| Hemlock | -- | -- | 23 | -- | 3 | 6 | 19 | 1 | -- | 2 | 13 | 2 | 46 | -- | -- |
| Tamarack | -- | -- | -- | 15 | -- | 135 | 7 | 953 | -- | -- | -- | -- | -- | -- | -- |
| Eastern redcedar | -- | -- | 9 | -- | -- | -- | -- | -- | 4 | -- | -- | 1 | 19 | -- | -- |
| Northern white-cedar | -- | -- | -- | 13 | -- | 37 | 339 | 19 | -- | 24 | 1 | 1 | 6 | -- | -- |
| Other softwoods | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Select white oak | 218 | 117 | 43 | -- | -- | -- | -- | -- | 184 | 4 | 4 | 17 | 15 | -- | -- |
| Select red oak | 49 | 19 | 44 | -- | 1 | -- | -- | -- | 110 | 81 | 23 | 26 | 10 | -- | -- |
| Other red oak | 228 | 114 | 82 | -- | -- | 15 | -- | -- | 194 | 2 | 4 | 31 | 2 | -- | -- |
| Select hickory | -- | -- | -- | -- | -- | -- | -- | -- | 22 | 23 | 2 | -- | 29 | -- | -- |
| Other hickory | -- | -- | -- | -- | -- | -- | -- | -- | 23 | -- | 13 | 1 | 12 | -- | -- |
| Basswood | -- | -- | -- | -- | 36 | -- | -- | -- | 24 | 10 | 55 | 5 | 12 | -- | 18 |
| Beech | -- | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 26 | -- | 1 | -- | -- |
| Yellow birch | -- | 5 | -- | 1 | -- | -- | 15 | -- | -- | 7 | 38 | 18 | -- | -- | -- |
| Hard maple | -- | 6 | 30 | 6 | 54 | 4 | 4 | -- | 81 | 22 | 379 | 46 | 74 | -- | -- |
| Soft maple | 40 | 74 | 362 | 98 | 87 | 41 | 98 | 53 | 146 | 191 | 155 | 243 | 173 | -- | 2 |
| Elm | 1 | -- | -- | 5 | 69 | -- | 10 | 2 | 54 | 43 | 113 | 22 | 10 | -- | -- |
| Black ash | -- | 5 | 5 | 151 | -- | -- | 173 | 27 | 6 | 498 | 36 | 27 | 41 | -- | -- |
| White & green ash | -- | -- | 5 | -- | 17 | -- | -- | -- | 12 | 68 | 77 | 17 | 24 | -- | -- |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | -- | -- | -- |
| Willow | 1 | -- | -- | 2 | -- | -- | -- | 21 | -- | -- | -- | 4 | -- | -- | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 2 | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | 1 | -- | -- | -- | 2 | -- | 4 | 3 | 8 | -- | -- | -- |
| Bigtooth aspen | 7 | 1 | 45 | 1 | -- | -- | -- | -- | 19 | -- | 5 | 112 | 10 | -- | -- |
| Quaking aspen | 78 | 95 | 94 | 18 | 631 | 15 | 8 | -- | 22 | 33 | 50 | 694 | 61 | -- | 1 |
| Paper birch | 5 | 1 | 2 | 31 | -- | 43 | 16 | 33 | 15 | 10 | 15 | 56 | 112 | -- | -- |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | -- | -- | -- | -- | -- |
| Black cherry | 42 | 69 | 27 | 59 | 25 | 1 | -- | 3 | 78 | 93 | 55 | 90 | 36 | -- | 217 |
| Black walnut | -- | -- | -- | -- | -- | -- | -- | -- | -- | 15 | 4 | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | -- | 1 | 2 | -- | -- |
| Other hardwoods | 19 | 17 | -- | 3 | -- | -- | 6 | -- | 87 | 51 | 23 | 66 | 69 | -- | 8 |
| Striped maple | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 17 | -- | -- |
| Mountain maple | -- | -- | 32 | 133 | -- | -- | 92 | -- | 1 | 106 | 32 | 34 | 62 | -- | -- |
| American hornbeam | -- | 4 | -- | -- | -- | -- | -- | -- | 37 | 19 | 126 | 32 | 1 | -- | -- |
| Apple | -- | -- | -- | -- | -- | -- | -- | -- | 3 | -- | -- | -- | -- | -- | -- |
| Eastern hophornbeam | -- | -- | 21 | -- | -- | -- | -- | -- | 75 | 41 | 168 | 21 | 12 | -- | -- |
| Pincherry | 9 | 1 | 2 | 1 | -- | 4 | -- | 15 | 15 | 5 | 7 | 16 | 5 | -- | -- |
| Chokecherry | 43 | 51 | 25 | 9 | 1 | 5 | -- | -- | 36 | 28 | 30 | 56 | 39 | -- | 6 |
| Wild plum | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 16 | -- | -- | -- | -- | -- |
| Mountain ash | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Green alder | 19 | -- | -- | 83 | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- |
| Speckled alder | 39 | 339 | 205 | 4,719 | -- | 2,314 | 3,135 | 2,516 | 155 | 3,702 | 174 | 2,355 | 1,536 | -- | 2,619 |

(Table 70 continued on next page)

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[1] Trees under 1.0-inch d.b.h. are also included.

(Table 70 continued)

| Shrub species group | Forest type | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar | Tamarack | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Non-stocked |
| Dogwood | 17 | 8 | 25 | 74 | 6 | 1 | 242 | 95 | 191 | 342 | 121 | 206 | 134 | -- | 298 |
| Black alder | 106 | -- | 2 | 5 | -- | 18 | 37 | 1,381 | 519 | 567 | 34 | 101 | 421 | -- | 9 |
| Witch hazel | -- | 17 | 560 | 18 | -- | -- | -- | -- | 44 | -- | 17 | 102 | 1 | -- | -- |
| Common ninebark | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- |
| Juneberry | 61 | 106 | 268 | 25 | -- | 95 | 9 | 162 | 152 | 35 | 25 | 190 | 27 | -- | -- |
| Hazel | 550 | 629 | 952 | 418 | 29 | 59 | 64 | 32 | 586 | 386 | 339 | 1,019 | 602 | -- | 104 |
| Prickly ash | 1 | 1 | 1 | 109 | -- | -- | 62 | 1 | 252 | 193 | 256 | 31 | 16 | -- | 327 |
| Alder buckthorn | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 | 8 | -- | 5 | -- | -- |
| Leatherwood | -- | -- | 14 | 1 | -- | -- | -- | -- | 1 | -- | 13 | 4 | 3 | -- | -- |
| Viburnum | -- | -- | -- | 2 | -- | 2 | -- | -- | 3 | 23 | 8 | 7 | 2 | -- | 15 |
| Elder | -- | -- | -- | -- | -- | -- | -- | -- | 16 | 17 | 20 | -- | -- | -- | -- |
| Sumac | 38 | 2 | -- | -- | -- | -- | -- | 1 | 35 | 5 | 38 | 16 | 7 | -- | -- |
| Buffaloberry | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| New Jersey tea | -- | 3 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Russian olive | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Shrubby willows | 123 | 79 | -- | 193 | 393 | 119 | 464 | 54 | 66 | 432 | 61 | 376 | 146 | -- | 217 |
| Miscellaneous tall shrubs | 27 | 126 | 1 | 13 | 5 | 370 | 599 | 588 | 17 | 393 | 41 | 62 | 20 | -- | 94 |
| Total tall shrubs | 2,138 | 2,212 | 3,322 | 7,203 | 1,673 | 4,998 | 6,061 | 7,385 | 3,353 | 7,676 | 2,793 | 6,276 | 4,082 | -- | 3,935 |
| Low shrubs | | | | | | | | | | | | | | | |
| Yew | -- | -- | -- | -- | -- | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- |
| Virginia creeper | 1 | -- | -- | -- | 35 | -- | -- | 1 | 12 | 18 | 7 | 3 | 2 | -- | -- |
| Labrador tea | 7 | -- | 1 | 25 | -- | 384 | 50 | 142 | -- | 4 | 2 | 1 | 12 | -- | -- |
| Leatherleaf | 12 | 6 | 1 | 1 | -- | 153 | 9 | 161 | -- | -- | 1 | 1 | 2 | -- | -- |
| Bog laurel | -- | -- | -- | -- | -- | 59 | 8 | 37 | -- | -- | -- | 1 | -- | -- | -- |
| Sweetfern | 66 | 24 | 9 | -- | -- | 1 | -- | -- | 23 | -- | -- | 15 | -- | -- | 7 |
| Gooseberry-current | 6 | 3 | 1 | 7 | 3 | 3 | 8 | 4 | 23 | 28 | 28 | 15 | 15 | -- | 12 |
| Raspberry-blackberry | 152 | 105 | 85 | 148 | 141 | 37 | 86 | 33 | 127 | 178 | 134 | 203 | 188 | -- | 276 |
| Rose | 19 | 8 | 7 | 1 | 5 | -- | -- | -- | 17 | 1 | 1 | 6 | 5 | -- | 1 |
| Bilberry-blueberry | 406 | 114 | 259 | 73 | -- | 348 | 21 | 245 | 190 | 4 | 34 | 135 | 60 | -- | 63 |
| Bush honeysuckle | 5 | 7 | 15 | 11 | 6 | 5 | 2 | 8 | 5 | 3 | 9 | 22 | 22 | -- | -- |
| Honeysuckle | 4 | 3 | 6 | 19 | -- | 2 | 5 | 2 | 8 | 3 | 6 | 12 | 15 | -- | -- |
| Poison ivy | 7 | 1 | 7 | -- | -- | -- | -- | -- | 12 | 3 | 3 | 2 | 3 | -- | -- |
| Greenbriar | -- | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bog rosemary | 1 | -- | -- | -- | -- | 18 | 1 | 8 | -- | -- | -- | -- | -- | -- | -- |
| Grape | -- | -- | -- | -- | -- | -- | -- | -- | 8 | 3 | 1 | -- | 1 | -- | -- |
| Strawberry | 17 | 20 | 17 | 31 | 73 | 5 | 11 | 9 | 11 | 24 | 18 | 48 | 35 | -- | 28 |
| Miscellaneous low shrubs | 83 | 35 | 38 | 13 | -- | 31 | 28 | 50 | 56 | 10 | 20 | 52 | 25 | -- | 41 |
| Total low shrubs | 786 | 326 | 448 | 329 | 263 | 1,046 | 231 | 700 | 492 | 279 | 264 | 516 | 385 | -- | 428 |
| All shrubs | 2,924 | 2,538 | 3,770 | 7,532 | 1,936 | 6,044 | 6,292 | 8,085 | 3,845 | 7,955 | 3,057 | 6,792 | 4,467 | -- | 4,363 |
| Number of plots[2/] | 176 | 134 | 55 | 100 | 13 | 78 | 75 | 56 | 528 | 211 | 752 | 838 | 129 | -- | 17 |

[2/] Number of plots by forest type from which average yields were derived.

Table 71.--All live above-ground tree biomass yields on commercial forest land by species group and forest type, Wisconsin, 1983

(In pounds per acre)

| | Forest type | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Species group | Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar | Tamarack |
| Softwoods | | | | | | | | |
| Jack pine | 80,928 | 5,614 | 5,733 | 133 | -- | 174 | 105 | 356 |
| Red pine | 3,986 | 107,160 | 14,460 | 970 | 534 | 1,027 | 34 | 169 |
| White pine | 1,256 | 7,494 | 77,976 | 2,509 | 3,826 | 2,118 | 1,873 | 2,473 |
| White spruce | -- | 883 | 1,677 | 4,507 | 102,341 | 148 | 1,311 | 354 |
| Black spruce | 93 | 408 | 1,275 | 3,003 | 452 | 39,903 | 3,768 | 6,989 |
| Balsam fir | 55 | 1,132 | 4,406 | 52,933 | 6,918 | 7,412 | 17,274 | 3,939 |
| Hemlock | -- | 282 | 1,213 | 1,778 | 563 | 1,017 | 3,676 | 69 |
| Tamarack | 4 | -- | 515 | 1,167 | -- | 8,391 | 4,277 | 40,632 |
| Eastern redcedar | 21 | 71 | -- | -- | -- | -- | -- | -- |
| Northern white-cedar | -- | 66 | 536 | 8,736 | 2,214 | 1,764 | 71,227 | 910 |
| Other softwoods | -- | 771 | 219 | -- | -- | -- | -- | -- |
| Total | 86,343 | 123,881 | 108,010 | 75,736 | 116,848 | 61,954 | 103,545 | 55,891 |
| Hardwoods | | | | | | | | |
| White oak | 541 | 354 | 2,986 | 23 | -- | -- | 58 | -- |
| Select red oak | 1,574 | 2,260 | 2,260 | 233 | -- | 460 | 142 | 61 |
| Other red oak | 7,404 | 3,410 | 7,677 | 28 | -- | 33 | 87 | -- |
| Select hickory | -- | -- | 174 | -- | -- | -- | 63 | -- |
| Other hickory | -- | -- | 17 | -- | -- | -- | 122 | -- |
| Basswood | -- | 53 | 448 | 62 | 416 | -- | 366 | -- |
| Beech | -- | 83 | -- | -- | -- | -- | -- | -- |
| Yellow birch | -- | 37 | 334 | 2,880 | 355 | 568 | 5,500 | 165 |
| Hard maple | -- | 1,205 | 1,269 | 1,230 | 1,337 | 455 | 354 | 120 |
| Soft maple | 338 | 2,494 | 6,520 | 6,344 | 1,854 | 1,631 | 3,345 | 2,255 |
| Elm | 101 | 452 | 350 | 773 | 247 | -- | 893 | 654 |
| Black ash | -- | 2 | 621 | 4,373 | 262 | 46 | 8,603 | 570 |
| White & green ash | -- | 270 | 190 | 31 | 1,255 | -- | 150 | -- |
| Cottonwood | 59 | -- | 2,161 | -- | -- | -- | -- | -- |
| Willow | -- | -- | -- | 30 | -- | -- | 156 | -- |
| Hackberry | -- | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | -- | -- | -- | 271 | 1,189 | 58 | 216 | -- |
| Bigtooth aspen | 809 | 883 | 2,023 | 428 | 248 | 420 | 278 | 1,280 |
| Quaking aspen | 3,982 | 6,287 | 14,197 | 9,401 | 7,399 | 5,252 | 3,501 | 2,257 |
| Paper birch | 568 | 1,816 | 5,406 | 6,201 | 987 | 2,037 | 6,795 | 4,001 |
| River birch | -- | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 19 | 199 | 1,135 | 1,379 | 1,222 | 550 | 57 | 114 |
| Black walnut | -- | -- | 32 | -- | -- | -- | -- | -- |
| Butternut | -- | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | 52 | 760 | -- | -- | -- | -- | 7 | -- |
| Noncommercial species | 20 | 67 | 422 | 301 | -- | -- | 48 | -- |
| Total | 15,467 | 20,632 | 48,222 | 33,988 | 16,771 | 11,510 | 30,741 | 11,477 |
| All species | 101,810 | 144,513 | 156,232 | 109,724 | 133,619 | 73,464 | 134,286 | 67,368 |

(Table 71 continued on next page)

(Table 71 continued)

|  | Forest type |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
| Species group | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Non-stocked |
| Softwoods |  |  |  |  |  |  |  |
| Jack pine | 3,109 | 109 | 201 | 1,519 | 539 | -- | 1,550 |
| Red pine | 803 | 39 | 338 | 1,292 | 1,842 | 14,488 | -- |
| White pine | 1,395 | 1,452 | 2,587 | 1,281 | 2,027 | -- | 463 |
| White spruce | 10 | 411 | 393 | 835 | 1,276 | 3,307 | 77 |
| Black spruce | -- | 255 | 99 | 302 | 322 | -- | -- |
| Balsam fir | 94 | 5,222 | 2,805 | 3,606 | 6,450 | -- | 51 |
| Hemlock | 45 | 1,744 | 6,287 | 213 | 594 | -- | 299 |
| Tamarack | 17 | 877 | 112 | 241 | 634 | -- | 631 |
| Eastern redcedar | 111 | 141 | 40 | 3 | 16 | -- | -- |
| Northern white-cedar | 5 | 3,458 | 995 | 444 | 1,022 | -- | -- |
| Other softwoods | 22 | -- | 1 | -- | -- | 66,025 | -- |
| Total | 5,611 | 13,708 | 13,858 | 9,736 | 14,722 | 83,820 | 3,071 |
| Hardwoods |  |  |  |  |  |  |  |
| White oak | 30,044 | 2,342 | 2,949 | 1,806 | 2,907 | -- | 4,995 |
| Select red oak | 44,436 | 1,936 | 9,338 | 5,496 | 11,301 | -- | 2,229 |
| Other red oak | 33,625 | 1,171 | 1,131 | 2,512 | 1,053 | -- | 11,483 |
| Select hickory | 4,934 | 29 | 655 | 47 | 1,029 | -- | 438 |
| Other hickory | 2,162 | 102 | 1,443 | 118 | -- | -- | 165 |
| Basswood | 3,069 | 2,478 | 17,094 | 1,051 | 1,158 | -- | 1,626 |
| Beech | 16 | 62 | 976 | 27 | -- | -- | -- |
| Yellow birch | 88 | 3,296 | 6,870 | 466 | 962 | -- | 272 |
| Hard maple | 3,252 | 2,442 | 48,723 | 3,006 | 4,043 | -- | 2,112 |
| Soft maple | 5,827 | 29,815 | 18,482 | 10,203 | 12,647 | -- | 702 |
| Elm | 2,698 | 10,867 | 8,694 | 1,153 | 1,541 | -- | 2,198 |
| Black ash | 383 | 26,373 | 2,728 | 1,096 | 1,563 | -- | 796 |
| White & green ash | 1,146 | 6,980 | 5,191 | 476 | 863 | -- | 146 |
| Cottonwood | 305 | 1,001 | 127 | 130 | 35 | -- | -- |
| Willow | 44 | 2,252 | 100 | 106 | 60 | -- | 1,419 |
| Hackberry | 51 | 65 | 28 | -- | -- | -- | -- |
| Balsam poplar | 31 | 501 | 110 | 614 | 224 | -- | -- |
| Bigtooth aspen | 5,110 | 357 | 2,227 | 11,631 | 4,387 | -- | 93 |
| Quaking aspen | 3,505 | 5,682 | 7,085 | 43,282 | 13,561 | -- | 3,750 |
| Paper birch | 4,772 | 3,837 | 5,594 | 9,709 | 64,667 | -- | 808 |
| River birch | 65 | 859 | -- | -- | -- | -- | -- |
| Black cherry | 3,611 | 713 | 2,925 | 1,547 | 942 | -- | 1,323 |
| Black walnut | 781 | -- | 146 | -- | -- | -- | 435 |
| Butternut | 1,001 | 105 | 812 | 71 | 49 | -- | 639 |
| Other hardwoods | 667 | 2,203 | 504 | 71 | 142 | -- | 326 |
| Noncommercial species | 2,174 | 966 | 3,230 | 925 | 1,293 | -- | 508 |
| Total | 153,797 | 106,434 | 147,162 | 95,543 | 124,427 | -- | 36,463 |
| All species | 159,408 | 120,142 | 161,020 | 105,279 | 139,149 | 83,820 | 39,534 |

Table 72.--All live above-ground tree biomass on commercial forest land by species group and forest type, Wisconsin, 1983

(In green tons)

| Species group | All types | Forest type<br>Jack pine | Red pine | White pine | Balsam fir | White spruce | Black spruce | Northern white-cedar |
|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | |
| Jack pine | 31,901,423 | 22,113,539 | 1,342,319 | 646,655 | 27,910 | -- | 23,683 | 19,391 |
| Red pine | 33,290,029 | 1,089,168 | 25,622,052 | 1,631,059 | 203,315 | 16,404 | 140,215 | 6,279 |
| White pine | 23,324,659 | 343,246 | 1,791,763 | 8,795,677 | 526,219 | 117,458 | 289,164 | 347,154 |
| White spruce | 7,626,857 | -- | 211,167 | 189,171 | 945,169 | 3,141,892 | 20,152 | 243,010 |
| Black spruce | 8,785,257 | 25,500 | 97,509 | 143,870 | 629,764 | 13,866 | 5,446,780 | 698,460 |
| Balsam fir | 33,680,908 | 14,938 | 270,694 | 496,885 | 11,100,013 | 212,383 | 1,011,672 | 3,201,796 |
| Hemlock | 15,696,211 | -- | 67,457 | 136,853 | 372,781 | 17,276 | 138,811 | 681,376 |
| Tamarack | 8,205,172 | 1,183 | -- | 58,111 | 244,786 | -- | 1,145,436 | 792,759 |
| Eastern redcedar | 357,260 | 5,709 | 16,916 | -- | -- | -- | -- | -- |
| Northern white-cedar | 20,711,115 | -- | 15,848 | 60,508 | 1,831,972 | 67,957 | 240,783 | 13,202,007 |
| Other softwoods | 315,370 | -- | 184,250 | 24,758 | [illegible] | -- | -- | -- |
| Total | 183,894,261 | 23,593,283 | 29,619,975 | 12,183,547 | 15,881,9[illegible] | 3,587,236 | 8,456,696 | 19,192,232 |
| Hardwoods | | | | | | | | |
| White oak | 55,153,727 | 147,759 | 84,750 | 336,810 | 4,743 | -- | -- | 10,794 |
| Select red oak | 97,516,483 | 430,012 | 540,472 | 254,960 | 48,756 | -- | 62,790 | 26,367 |
| Other red oak | 60,135,348 | 2,023,161 | 815,230 | 865,974 | 5,955 | -- | 4,474 | 16,111 |
| Select hickory | 8,852,912 | -- | -- | 19,603 | -- | -- | -- | 11,589 |
| Other hickory | 6,266,473 | -- | -- | 1,877 | -- | -- | -- | 22,535 |
| Basswood | 42,458,393 | -- | 12,619 | 50,496 | 12,963 | 12,771 | -- | 67,772 |
| Beech | 2,074,892 | -- | 19,832 | -- | -- | -- | -- | -- |
| Yellow birch | 18,765,601 | -- | 8,832 | 37,715 | 603,961 | 10,891 | 77,571 | 1,019,334 |
| Hard maple | 110,772,803 | -- | 288,153 | 143,137 | 257,995 | 41,045 | 62,073 | 65,650 |
| Soft maple | 88,416,305 | 92,374 | 596,425 | 735,472 | 1,330,370 | 56,904 | 222,635 | 619,998 |
| Elm | 31,105,789 | 27,684 | 108,104 | 39,531 | 162,063 | 7,595 | -- | 165,532 |
| Black ash | 27,370,645 | -- | 579 | 70,077 | 917,020 | 8,055 | 6,333 | 1,594,745 |
| White & green ash | 17,565,489 | -- | 64,502 | 21,439 | 6,604 | 38,525 | -- | 27,719 |
| Cottonwood | 1,793,794 | 16,021 | -- | 243,714 | -- | -- | -- | -- |
| Willow | 2,000,372 | -- | -- | -- | 6,290 | -- | -- | 28,863 |
| Hackberry | 169,438 | -- | -- | -- | -- | -- | -- | -- |
| Balsam poplar | 1,790,031 | -- | -- | -- | 56,842 | 36,504 | 7,852 | 40,069 |
| Bigtooth aspen | 33,368,546 | 221,147 | 211,006 | 228,175 | 89,781 | 7,608 | 57,345 | 51,554 |
| Quaking aspen | 105,932,416 | 1,087,938 | 1,503,156 | 1,601,294 | 1,971,395 | 227,151 | 716,972 | 648,867 |
| Paper birch | 61,536,562 | 155,310 | 434,182 | 609,803 | 1,300,306 | 30,311 | 278,011 | 1,259,522 |
| River birch | 625,592 | -- | -- | -- | -- | -- | -- | -- |
| Black cherry | 14,985,469 | 5,105 | 47,497 | 128,075 | 289,103 | 37,510 | 75,024 | 10,477 |
| Black walnut | 1,445,608 | -- | -- | 3,619 | -- | -- | -- | -- |
| Butternut | 3,300,969 | -- | -- | -- | -- | -- | -- | -- |
| Other hardwoods | 3,712,380 | 14,333 | 181,797 | -- | -- | -- | -- | 1,334 |
| Noncommercial species | 12,266,115 | 5,400 | 16,020 | 47,649 | 63,127 | -- | -- | 8,936 |
| Total | 809,382,152 | 4,226,244 | 4,933,156 | 5,439,420 | 7,127,274 | 514,870 | 1,571,080 | 5,697,768 |
| All species | 993,276,413 | 27,819,527 | 34,553,131 | 17,622,967 | 23,009,203 | 4,102,106 | 10,027,776 | 24,890,000 |

(Table 72 continued on next page)

(Table 72 continued)

| Species group | Forest type<br>Tamarack | Oak-hickory | Elm-ash-soft maple | Maple-birch | Aspen | Paper birch | Exotic | Nonstocked |
|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | |
| Jack pine | 39,662 | 4,444,415 | 67,622 | 401,220 | 2,477,878 | 172,858 | -- | 124,271 |
| Red pine | 18,823 | 1,148,420 | 24,363 | 675,899 | 2,107,051 | 591,044 | 15,937 | -- |
| White pine | 275,371 | 1,992,823 | 900,877 | 5,169,157 | 2,088,349 | 650,266 | -- | 37,135 |
| White spruce | 39,368 | 14,709 | 254,814 | 785,860 | 1,362,306 | 409,393 | 3,638 | 6,208 |
| Black spruce | 778,220 | -- | 158,134 | 196,954 | 492,851 | 103,349 | -- | -- |
| Balsam fir | 438,658 | 134,994 | 3,239,032 | 5,606,383 | 5,880,237 | 2,069,158 | -- | 4,065 |
| Hemlock | 7,726 | 64,948 | 1,081,951 | 12,564,433 | 348,003 | 190,645 | -- | 23,951 |
| Tamarack | 4,524,342 | 24,086 | 544,151 | 223,538 | 392,751 | 203,397 | -- | 50,632 |
| Eastern redcedar | -- | 158,171 | 87,288 | 79,250 | 4,814 | 5,112 | -- | -- |
| Northern white-cedar | 101,343 | 6,581 | 2,144,946 | 1,987,504 | 723,730 | 327,936 | -- | -- |
| Other softwoods | -- | 30,770 | -- | 2,965 | -- | -- | 72,627 | -- |
| Total | 6,223,513 | 8,019,917 | 8,503,178 | 27,693,163 | 15,877,970 | 4,723,158 | 92,202 | 246,262 |
| Hardwoods | | | | | | | | |
| White oak | -- | 42,942,850 | 1,452,711 | 5,894,316 | 2,945,780 | 932,604 | -- | 400,610 |
| Select red oak | 6,828 | 63,515,820 | 1,201,037 | 18,662,050 | 8,963,303 | 3,625,294 | -- | 178,794 |
| Other red oak | -- | 48,063,205 | 726,366 | 2,259,313 | 4,096,771 | 337,811 | -- | 920,977 |
| Select hickory | -- | 7,052,382 | 17,741 | 1,309,294 | 77,042 | 330,140 | -- | 35,121 |
| Other hickory | -- | 3,090,612 | 63,340 | 2,883,214 | 191,694 | -- | -- | 13,201 |
| Basswood | -- | 4,386,562 | 1,537,091 | 34,161,653 | 1,714,530 | 371,557 | -- | 130,379 |
| Beech | -- | 22,651 | 38,650 | 1,950,212 | 43,547 | -- | -- | -- |
| Yellow birch | 18,411 | 125,932 | 2,044,707 | 13,728,452 | 759,553 | 308,450 | -- | 21,792 |
| Hard maple | 13,352 | 4,648,379 | 1,514,553 | 97,370,566 | 4,901,346 | 1,297,138 | -- | 169,416 |
| Soft maple | 251,090 | 8,329,296 | 18,494,207 | 36,935,813 | 16,638,378 | 4,057,042 | -- | 56,301 |
| Elm | 72,863 | 3,856,491 | 6,741,104 | 17,373,829 | 1,880,287 | 494,443 | -- | 176,263 |
| Black ash | 63,518 | 547,508 | 16,359,395 | 5,451,016 | 1,787,209 | 501,378 | -- | 63,812 |
| White & green ash | -- | 1,637,682 | 4,329,881 | 10,374,010 | 776,526 | 276,908 | -- | 11,693 |
| Cottonwood | -- | 435,588 | 620,630 | 254,746 | 211,916 | 11,179 | -- | -- |
| Willow | -- | 62,930 | 1,396,776 | 200,382 | 172,111 | 19,191 | -- | 113,829 |
| Hackberry | -- | 72,294 | 40,472 | 56,672 | -- | -- | -- | -- |
| Balsam poplar | -- | 44,091 | 310,651 | 220,693 | 1,001,591 | 71,738 | -- | -- |
| Bigtooth aspen | 142,492 | 7,304,512 | 221,492 | 4,451,275 | 18,967,359 | 1,407,376 | -- | 7,424 |
| Quaking aspen | 251,282 | 5,009,541 | 3,524,236 | 14,159,065 | 70,580,408 | 4,350,355 | -- | 300,756 |
| Paper birch | 445,465 | 6,820,910 | 2,380,299 | 11,179,061 | 15,833,483 | 20,745,082 | -- | 64,817 |
| River birch | -- | 92,963 | 532,629 | -- | -- | -- | -- | -- |
| Black cherry | 12,716 | 5,160,964 | 442,179 | 5,846,102 | 2,522,341 | 302,261 | -- | 106,115 |
| Black walnut | -- | 1,115,744 | -- | 291,379 | -- | -- | -- | 34,866 |
| Butternut | -- | 1,431,389 | 65,193 | 1,621,785 | 115,668 | 15,651 | -- | 51,283 |
| Other hardwoods | -- | 952,779 | 1,366,405 | 1,007,686 | 116,468 | 45,440 | -- | 26,138 |
| Noncommercial species | -- | 3,106,756 | 598,985 | 6,454,369 | 1,509,216 | 414,884 | -- | 40,773 |
| Total | 1,278,017 | 219,829,831 | 66,020,730 | 294,096,953 | 155,806,527 | 39,915,922 | -- | 2,924,360 |
| All species | 7,501,530 | 227,849,748 | 74,523,908 | 321,790,116 | 171,684,497 | 44,639,080 | 92,202 | 3,170,622 |

Table 73.--All live above-ground tree biomass by species group and tree biomass component, Wisconsin, 1983

(In green tons)

| | | Biomass component | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Growing stock | | | Cull | | |
| Species group | All components | All live 1- to 5-inch trees | Stumps | Boles | Tops and limbs | Stumps | Boles | Tops and limbs |
| Softwoods | | | | | | | | |
| Jack pine | 31,901,423 | 4,871,034 | 1,255,526 | 16,053,012 | 7,296,082 | 112,898 | 1,635,819 | 677,052 |
| Red pine | 33,290,029 | 3,190,443 | 1,305,904 | 19,511,246 | 8,867,864 | 17,514 | 281,984 | 115,074 |
| White pine | 23,324,659 | 2,069,547 | 878,635 | 12,940,036 | 5,881,203 | 75,293 | 1,023,054 | 456,891 |
| White spruce | 7,626,857 | 1,090,542 | 426,783 | 4,049,560 | 1,840,517 | 13,383 | 147,522 | 58,550 |
| Black spruce | 8,785,257 | 4,920,293 | 242,012 | 2,336,213 | 1,061,805 | 7,673 | 184,689 | 32,572 |
| Balsam fir | 33,680,908 | 10,211,999 | 1,651,821 | 14,389,931 | 6,540,199 | 46,659 | 637,127 | 203,172 |
| Hemlock | 15,696,211 | 641,783 | 734,624 | 8,770,923 | 3,986,390 | 94,230 | 1,015,034 | 453,227 |
| Tamarack | 8,205,172 | 2,434,729 | 311,962 | 3,520,311 | 1,599,981 | 16,723 | 237,182 | 84,284 |
| Eastern redcedar | 357,260 | 119,654 | 9,524 | 68,232 | 31,012 | 5,042 | 105,586 | 18,210 |
| Northern white-cedar | 20,711,115 | 4,722,797 | 1,117,377 | 8,071,784 | 3,668,652 | 234,745 | 2,092,041 | 803,719 |
| Other softwoods | 315,370 | 81,521 | 9,768 | 85,767 | 38,981 | 5,301 | 68,915 | 25,117 |
| Total | 183,894,261 | 34,354,342 | 7,943,936 | 89,797,015 | 40,812,686 | 629,461 | 7,428,953 | 2,927,868 |
| Hardwoods | | | | | | | | |
| White oak | 55,153,727 | 2,300,582 | 2,500,405 | 23,761,134 | 10,799,400 | 1,002,535 | 10,343,958 | 4,445,713 |
| Select red oak | 97,516,483 | 2,677,779 | 4,115,286 | 52,537,400 | 23,878,297 | 719,914 | 9,393,979 | 4,193,828 |
| Other red oak | 60,135,348 | 2,207,730 | 2,199,777 | 23,769,473 | 10,803,233 | 1,240,393 | 13,846,613 | 6,068,129 |
| Select hickory | 8,852,912 | 670,700 | 367,745 | 4,298,263 | 1,953,560 | 85,425 | 1,028,834 | 448,385 |
| Other hickory | 6,266,473 | 1,016,915 | 249,594 | 3,071,255 | 1,395,887 | 24,549 | 374,152 | 134,121 |
| Basswood | 42,458,393 | 2,596,195 | 1,977,870 | 22,763,123 | 10,345,858 | 252,772 | 3,171,047 | 1,351,528 |
| Beech | 2,074,892 | 146,243 | 69,324 | 877,196 | 398,690 | 27,875 | 393,213 | 162,351 |
| Yellow birch | 18,765,601 | 1,806,225 | 708,609 | 7,309,834 | 3,322,314 | 325,937 | 3,734,561 | 1,558,121 |
| Hard maple | 110,772,803 | 14,358,450 | 4,008,922 | 50,409,618 | 22,911,145 | 907,119 | 12,814,948 | 5,362,601 |
| Soft maple | 88,416,305 | 18,844,878 | 2,768,828 | 35,467,032 | 16,119,732 | 672,770 | 10,497,961 | 4,045,104 |
| Elm | 31,105,789 | 3,601,568 | 1,544,597 | 14,243,817 | 6,473,814 | 347,394 | 3,451,265 | 1,443,334 |
| Black ash | 27,370,645 | 4,822,380 | 1,296,614 | 12,857,222 | 5,843,623 | 129,535 | 1,841,878 | 579,393 |
| White & green ash | 17,565,489 | 1,460,581 | 722,702 | 9,232,450 | 4,196,146 | 93,698 | 1,305,469 | 554,443 |
| Cottonwood | 1,793,794 | 12,699 | 86,923 | 1,045,931 | 475,379 | 11,842 | 110,704 | 50,316 |
| Willow | 2,000,372 | 52,701 | 71,585 | 783,618 | 356,156 | 37,140 | 501,152 | 198,020 |
| Hackberry | 169,438 | 30,626 | 8,620 | 81,270 | 36,939 | 1,015 | 7,541 | 3,427 |
| Balsam poplar | 1,790,031 | 173,657 | 64,722 | 1,000,461 | 454,701 | 3,585 | 63,874 | 29,031 |
| Bigtooth aspen | 33,368,546 | 2,640,613 | 1,037,187 | 18,555,898 | 8,433,661 | 94,549 | 1,816,491 | 790,147 |
| Quaking aspen | 105,932,416 | 15,119,383 | 3,469,804 | 51,729,881 | 23,511,194 | 498,959 | 8,198,032 | 3,405,163 |
| Paper birch | 61,536,562 | 8,587,770 | 2,371,797 | 30,729,452 | 13,966,525 | 273,064 | 4,019,351 | 1,588,603 |
| River birch | 625,592 | 71,060 | 20,192 | 254,937 | 115,867 | 7,476 | 107,295 | 48,765 |
| Black cherry | 14,985,469 | 2,129,319 | 416,960 | 5,377,126 | 2,443,882 | 208,221 | 3,207,170 | 1,202,791 |
| Black walnut | 1,445,608 | 14,337 | 58,471 | 736,606 | 334,789 | 15,140 | 196,814 | 89,451 |
| Butternut | 3,300,969 | 92,428 | 97,241 | 1,270,338 | 577,369 | 65,751 | 825,557 | 372,285 |
| Other hardwoods | 3,712,380 | 638,784 | 85,672 | 842,711 | 383,009 | 104,843 | 1,180,313 | 477,048 |
| Noncommercial species | 12,266,115 | 8,716,924 | -- | -- | -- | 89,587 | 3,120,058 | 339,546 |
| Total | 809,382,152 | 94,790,527 | 30,319,447 | 373,006,046 | 169,531,170 | 7,241,088 | 95,552,230 | 38,941,644 |
| All species | 993,276,413 | 129,144,869 | 38,263,383 | 462,803,061 | 210,343,856 | 7,870,549 | 102,981,183 | 41,869,512 |

## Table 74.--All live above-ground tree biomass by species group and tree biomass component, Wisconsin, 1983

(In thousand cubic feet)

| Species group | All components | Biomass component: All live 1- to 5-inch trees | Growing stock: Stumps | Growing stock: Boles | Growing stock: Tops and limbs | Cull: Stumps | Cull: Boles | Cull: Tops and limbs |
|---|---|---|---|---|---|---|---|---|
| Softwoods | | | | | | | | |
| Jack pine | 1,339,733 | 204,432 | 52,732 | 674,286 | 306,452 | 4,745 | 68,667 | 28,419 |
| Red pine | 1,620,629 | 154,799 | 63,604 | 950,197 | 431,840 | 851 | 13,734 | 5,604 |
| White pine | 1,289,367 | 114,531 | 48,536 | 715,250 | 325,085 | 4,149 | 56,559 | 25,257 |
| White spruce | 432,845 | 61,848 | 24,211 | 229,860 | 104,471 | 762 | 8,370 | 3,323 |
| Black spruce | 538,730 | 301,700 | 14,850 | 143,261 | 65,126 | 468 | 11,326 | 1,999 |
| Balsam fir | 1,537,114 | 467,638 | 75,328 | 655,672 | 298,030 | 2,123 | 29,067 | 9,256 |
| Hemlock | 659,834 | 26,933 | 30,930 | 368,660 | 167,555 | 3,975 | 42,707 | 19,074 |
| Tamarack | 358,506 | 107,516 | 13,561 | 153,097 | 69,590 | 727 | 10,349 | 3,666 |
| Eastern redcedar | 24,607 | 8,256 | 654 | 4,689 | 2,132 | 348 | 7,276 | 1,252 |
| Northern white-cedar | 1,426,491 | 325,862 | 76,850 | 555,587 | 252,496 | 16,179 | 144,158 | 55,359 |
| Other softwoods | 15,039 | 3,879 | 467 | 4,095 | 1,861 | 254 | 3,285 | 1,198 |
| Total | 9,242,895 | 1,777,394 | 401,723 | 4,454,654 | 2,024,638 | 34,581 | 395,498 | 154,407 |
| Hardwoods | | | | | | | | |
| White oak | 1,931,868 | 81,232 | 87,681 | 832,262 | 378,246 | 35,066 | 361,916 | 155,465 |
| Select red oak | 3,391,620 | 94,554 | 143,176 | 1,826,983 | 830,369 | 24,991 | 326,037 | 145,510 |
| Other red oak | 2,067,316 | 76,974 | 75,629 | 816,865 | 371,300 | 42,649 | 475,603 | 208,296 |
| Select hickory | 306,400 | 23,388 | 12,704 | 148,661 | 67,571 | 2,947 | 35,612 | 15,517 |
| Other hickory | 217,794 | 35,462 | 8,690 | 106,693 | 48,489 | 846 | 12,980 | 4,644 |
| Basswood | 2,029,711 | 123,496 | 94,621 | 1,088,659 | 494,805 | 12,088 | 151,458 | 64,584 |
| Beech | 86,244 | 6,137 | 2,872 | 36,446 | 16,569 | 1,160 | 16,325 | 6,735 |
| Yellow birch | 699,125 | 68,174 | 26,393 | 271,374 | 123,589 | 12,118 | 138,973 | 57,904 |
| Hard maple | 4,194,210 | 549,722 | 151,723 | 1,905,751 | 866,160 | 34,260 | 484,199 | 202,395 |
| Soft maple | 3,823,004 | 817,921 | 119,652 | 1,532,245 | 696,409 | 29,029 | 453,262 | 174,486 |
| Elm | 1,217,693 | 141,954 | 60,464 | 557,089 | 253,203 | 13,589 | 134,972 | 56,412 |
| Black ash | 1,168,206 | 205,780 | 55,376 | 548,805 | 249,401 | 5,522 | 78,599 | 24,723 |
| White & green ash | 748,626 | 62,328 | 30,792 | 393,487 | 178,828 | 3,991 | 55,588 | 23,612 |
| Cottonwood | 69,731 | 500 | 3,372 | 40,655 | 18,483 | 463 | 4,302 | 1,956 |
| Willow | 78,023 | 2,079 | 2,800 | 30,594 | 13,903 | 1,444 | 19,510 | 7,693 |
| Hackberry | 6,637 | 1,207 | 337 | 3,178 | 1,444 | 40 | 296 | 135 |
| Balsam poplar | 90,744 | 8,782 | 3,275 | 50,738 | 23,059 | 181 | 3,237 | 1,472 |
| Bigtooth aspen | 1,593,566 | 125,595 | 49,518 | 886,540 | 402,938 | 4,510 | 86,730 | 37,735 |
| Quaking aspen | 5,045,604 | 719,191 | 165,366 | 2,464,590 | 1,120,146 | 23,778 | 390,375 | 162,158 |
| Paper birch | 2,559,121 | 360,436 | 98,512 | 1,275,948 | 579,924 | 11,327 | 167,043 | 65,931 |
| River birch | 25,950 | 2,982 | 840 | 10,558 | 4,800 | 309 | 4,442 | 2,019 |
| Black cherry | 610,841 | 86,548 | 16,994 | 219,320 | 99,684 | 8,495 | 130,738 | 49,062 |
| Black walnut | 58,841 | 583 | 2,387 | 29,979 | 13,622 | 614 | 8,012 | 3,644 |
| Butternut | 134,416 | 3,756 | 3,956 | 51,728 | 23,517 | 2,675 | 33,624 | 15,160 |
| Other hardwoods | 156,095 | 26,803 | 3,601 | 35,484 | 16,130 | 4,394 | 49,622 | 20,061 |
| Noncommercial species | 515,629 | 366,457 | -- | -- | -- | 3,774 | 131,083 | 14,315 |
| Total | 32,827,015 | 3,992,051 | 1,220,731 | 15,165,222 | 6,892,589 | 280,260 | 3,754,538 | 1,521,624 |
| All species | 42,069,910 | 5,769,445 | 1,622,454 | 19,619,876 | 8,917,227 | 314,841 | 4,150,036 | 1,676,031 |

Table 75.--Sampling errors[1] for estimates smaller than the Unit totals of volume, net growth, removals, and area of commercial forest land, Wisconsin, 1983

| Sampling error | Commercial forest land | Growing stock |  |  | Sawtimber |  |  |
|---|---|---|---|---|---|---|---|
|  |  | Inventory | Growth | Removals | Inventory | Growth | Removals |
| Percent | Thousand acres | - - - -Thousand cubic feet- - - - |  |  | - - - -Thousand board feet[2] - - - |  |  |
| 1 | 744.0 | 17,213.0 | 1,392.4 | 29,033.7 | 88,627.4 | 8,171.1 | 104,159.6 |
| 2 | 186.0 | 4,303.2 | 348.1 | 7,258.4 | 22,156.9 | 2,042.8 | 26,039.9 |
| 3 | 82.7 | 1,912.6 | 154.7 | 3,226.0 | 9,847.5 | 907.9 | 11,573.3 |
| 4 | 46.5 | 1,075.8 | 87.0 | 1,814.6 | 5,539.2 | 510.7 | 6,510.0 |
| 5 | 29.8 | 688.5 | 55.7 | 1,161.3 | 3,545.1 | 326.8 | 4,166.4 |
| 10 | 7.4 | 172.1 | 13.9 | 290.3 | 886.3 | 81.7 | 1,041.6 |
| 15 | 3.3 | 76.5 | 6.2 | 129.0 | 393.9 | 36.3 | 462.9 |
| 20 | 1.9 | 43.0 | 3.5 | 72.6 | 221.6 | 20.4 | 260.4 |
| 25 | 1.2 | 27.5 | 2.2 | 46.5 | 141.8 | 13.1 | 166.7 |
| 50 | 0.3 | 6.9 | 0.6 | 11.6 | 35.5 | 3.3 | 41.7 |
| 100 | 0.1 | 1.7 | 0.1 | 2.9 | 8.9 | 0.8 | 10.4 |

[1] At the 68-percent probability level.

[2] International 1/4-inch rule.

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The fourth inventory of the timber resource of Wisconsin shows a 2 percent increase in commercial forest area and a 39 percent gain in growing-stock volume between 1968 and 1983. Presented are highlights and statistics on area, volume, growth, mortality, removals utilization, and biomass.

KEY WORDS: Timber resource, statistics, area, volume, growth, mortality, removals.